

## SEQUENCE LISTING

<120> ENDOZEPINE-LIKE POLYPEPTIDES AND POLYNUCLEOTIDES
ENCODING SAME

<130> 15966-575CIP

<140> 10/083,919

<141> 2002-02-27

<150> 60/157,786

<151> 1999-10-05

<150> 60/164,164

<151> 1999-11-09

- <150> 60/174,505
- <151> 2000-01-04
- <150> 60/183,859
- <151> 2000-02-22
- <150> 60/190,740
- <151> 2000-03-20
- <150> 60/191,133
- <151> 2000-03-22
- <150> 60/206,006
- <151> 2000-05-19
- <150> 60/215,684
- <151> 2000-06-30
- <150> 60/219,490
- <151> 2000-07-20
- <150> 60/227,072
- <151> 2000-08-22
- <150> 09/679,460
- <151> 2000-10-04

<150> 09/679,740

<151> 2000-10-05

<150> 60/271,909

<151> 2001-02-27

<160> 202

<170> PatentIn Ver. 2.1

<210> 1

<211> 318

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

<222> (1)..(318)

<223> wherein n is a g or t

<400> 1

gatcgagtag taacagccac tccaactctc cacctccagc ttctagcacc agggaccgcc 60 tccaccaccc catgtgccaa gtggagttcg agctntgcgg ccctcaagca gctgaagggt 120 cccgtgagcg atcaggagaa gctgctggtc tacggcttgt acaaacaggc cacccagggc 180 gactgcgaca tccccggccc tccggcctca gacgtgagag ccagggccaa gtgggaggct 240 tggagcgca acaaaggggc gtccaagatg gacgccatga ggggctacgc ggccaaagtg 300 gaggagctga cgaagaag cgaagaag

<210> 2

<212> PRT <213> Homo sapiens <220> <221> VARIANT <222> (32) <223> wherein Xaa is any amino acid <400> 2 Asp Arg Val Val Thr Ala Thr Pro Thr Leu His Leu Gln Leu Leu Ala 1 5 10 15 Pro Gly Thr Ala Ser Thr Thr Pro Cys Ala Lys Trp Ser Ser Ser Xaa 20 25 30 Ala Ala Leu Lys Gln Leu Lys Gly Pro Val Ser Asp Gln Glu Lys Leu 35 40 45 Leu Val Tyr Gly Leu Tyr Lys Gln Ala Thr Gln Gly Asp Cys Asp Ile 50 55 60 Pro Gly Pro Pro Ala Ser Asp Val Arg Ala Arg Ala Lys Trp Glu Ala 65 70 75 80 Trp Ser Ala Asn Lys Gly Ala Ser Lys Met Asp Ala Met Arg Gly Tyr 85 90 95

<211> 107

Ala Ala Lys Val Glu Glu Leu Thr Lys Lys Glu

100 105

<210> 3

<211> 351

<212> DNA

<213> Homo sapiens

<400> 3

gtataagaca tacagaagga atgcctggag agcagcaaca gcccagctgc ggccaccatg 60 tccctgcagg ctgattttga catggtcaca gaagatgtga ggaagctgaa aacaagacca 120 gatgatgaag aactgaaaga actttatggg ctttacaaac aagctgtaat tggaaacatt 180 aatattgagt gttcagaaat gctagaatta aaaggcaagg ccaaatggga agcacagaac 240 ccccaaaaag gattgtcaga ggaagatatg atgcgtgcct ttatttctaa agccgaagag 300 ctgatagaaa aatatggaat ttagaataaa gcatatgata aattttcctt t 351

<210> 4

<211> 88

<212> PRT

<213> Homo sapiens

<400> 4

Met Ser Leu Gln Ala Asp Phe Asp Met Val Thr Glu Asp Val Arg Lys

1 5 10

Leu Lys Thr Arg Pro Asp Asp Glu Glu Leu Lys Glu Leu Tyr Gly Leu

20

25

30

Tyr Lys Gln Ala Val Ile Gly Asn Ile Asn Ile Glu Cys Ser Glu Met

35 40 45

Leu Glu Leu Lys Gly Lys Ala Lys Trp Glu Ala Gln Asn Pro Gln Lys
50 55 60

Gly Leu Ser Glu Glu Asp Met Met Arg Ala Phe Ile Ser Lys Ala Glu
65 70 75 80

Glu Leu Ile Glu Lys Tyr Gly Ile

85

<210> 5

<211> 565

<212> DNA

<213> Homo sapiens

<400> 5

geteacacet gtaateceag catttgggag gecaaggeag geagattatg tgaggteaag 60 agtteeagae cagetgteea acatggeaaa acceatetee actaaaaata caaaaattag 120 ceggeatggg tggeatgeag etgtaateae agetgetegg gaggetgagg eggagaatea 180 cttgagetgg gaagaaaaaa aaaaaaaaa aagatgtgea ggtattaage actttaagae 240 caageeagea gatgatgaga tgeggtteet ttaeggeeae tacaaaegag egactgtagg 300 caacataaag acagaaegge eagggatggt ggaetteaag ggeaaageea agtgggatee 360 ctggaattta gtgaaagggg etgeeaggga agateeeag aageeaaag ettaegteaa 420 aaaagtagaa gagttaaaga aaaaatteag aataegaga actggaattg ttgeeageea 480 tgeetttgte etaaaetgag acaatgeett gttttteta eaetgtggat ggtgggaaet 540

<210> 6

<211> 138

<212> PRT

<213> Homo sapiens

<400> 6

Met Ala Lys Pro Ile Ser Thr Lys Asn Thr Lys Ile Ser Arg His Gly

5 10 15

Trp His Ala Ala Val Ile Thr Ala Ala Arg Glu Ala Glu Ala Glu Asn

20 25 30

His Leu Ser Trp Glu Glu Lys Lys Lys Lys Lys Arg Cys Ala Gly Ile

35 40 45

Lys His Phe Lys Thr Lys Pro Ala Asp Asp Glu Met Arg Phe Leu Tyr

50 55 60

Gly His Tyr Lys Arg Ala Thr Val Gly Asn Ile Lys Thr Glu Arg Pro

65 70 75 80

Gly Met Val Asp Phe Lys Gly Lys Ala Lys Trp Asp Pro Trp Asn Leu

90 95

Val Lys Gly Ala Ala Arg Glu Asp Pro Met Lys Ala Lys Ala Tyr Val

100 105 110

Lys Lys Val Glu Glu Leu Lys Lys Phe Arg Ile Arg Glu Thr Gly
115 120 125

Ile Val Ala Ser His Ala Phe Val Leu Asn

130 135

<210> 7

<211> 310

<212> DNA

<213> Homo sapiens

<400> 7

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<210> 8

<211> 96

<212> PRT

<213> Homo sapiens

<400> 8

Met Leu Leu Phe Val Cys Leu Phe Phe Leu Lys Ala Asp Phe Asp

Arg Ala Ala Glu Asp Val Arg Lys Leu Lys Ala Arg Pro Asp Asp Gly

Glu Leu Lys Glu Leu Tyr Gly Leu Tyr Lys Gln Ala Ile Val Gly Asp

Ile Asn Ile Ala Cys Pro Gly Met Leu Asp Leu Lys Gly Lys Ala Lys

Trp Glu Ala Trp Asn Leu Lys Lys Gly Leu Ser Thr Glu Asp Ala Thr

Ser Ala Tyr Ile Ser Lys Ala Lys Glu Leu Ile Glu Lys Tyr Gly Ile

<210> 9

<211> 280

<212> DNA

<213> Homo sapiens

<400> 9

accaccatgg cactgcaggc tgaattcgac aaggctgcag aagacgtgag gaagctgcca 60

acaagaccag cagataataa agaactgaaa aaactcgatg gactttacaa acaagctata 120 attggagaca ttaatattga gtatctggga atgctggact ttaagggcaa ggccaaatgc 180 gcagcatgga ccctccaaaa aaggttgtca aaggaagatg caacgagtgt ctctatttct 240 aaggcaaaag agccgataga aaaataggac atttagaata 280

<210> 10

<211> 86

<212> PRT

<213> Homo sapiens

<400> 10

Met Ala Leu Gln Ala Glu Phe Asp Lys Ala Ala Glu Asp Val Arg Lys

1 5 10 15

Leu Pro Thr Arg Pro Ala Asp Asn Lys Glu Leu Lys Lys Leu Asp Gly
20 25 30

Leu Tyr Lys Gln Ala Ile Ile Gly Asp Ile Asn Ile Glu Tyr Leu Gly

35 40 45

Met Leu Asp Phe Lys Gly Lys Ala Lys Cys Ala Ala Trp Thr Leu Gln
50 55 60

Lys Arg Leu Ser Lys Glu Asp Ala Thr Ser Val Ser Ile Ser Lys Ala
65 70 75 80

Lys Glu Pro Ile Glu Lys

<210> 11 <211> 267 <212> DNA <213> Homo sapiens <400> 11 accgcctcca ccaccccatg tgccaagtgg agttcgagct gcgcggccct caagcagctg 60 aagggtcccg tgagcgatca ggagaagctg ctggtctacg gcttgtacaa acaggccacc 120 cagggcgact gcgacatccc cggccctccg gcctcagacg tgagagccag ggccaagtgg 180 gaggettgga gegegaacaa aggggegtee aagatggaeg ecatgagggg etacgeggee 240 aaagtggagg agctgacgaa gaaggaa 267 <210> 12 <211> 89 <212> PRT <213> Homo sapiens <400> 12 Thr Ala Ser Thr Thr Pro Cys Ala Lys Trp Ser Ser Ser Cys Ala Ala 1 5 10 15 Leu Lys Gln Leu Lys Gly Pro Val Ser Asp Gln Glu Lys Leu Leu Val 20 25 30

45

Tyr Gly Leu Tyr Lys Gln Ala Thr Gln Gly Asp Cys Asp Ile Pro Gly

40

Pro Pro Ala Ser Asp Val Arg Ala Arg Ala Lys Trp Glu Ala Trp Ser
50 55 60

Ala Asn Lys Gly Ala Ser Lys Met Asp Ala Met Arg Gly Tyr Ala Ala 65 70 75 80

Lys Val Glu Glu Leu Thr Lys Lys Glu

85

<210> 13

<211> 481

<212> DNA

<213> Homo sapiens

<400> 13

tettettegt cagetectec actitggeeg egtageecet catggegtee atettggaeg 60
cecetttgtt egegeteeaa geeteecaet tggeeetgge teteaegtet gaggeeggag 120
ggeegggat gtegeagteg eeetgggtgg eetgttgta caageegtag accageaget 180
teteetgate geteaeggga eeetteaget gettgaggge egeaaagete gaacteeaet 240
tggeacatgg ggtggtggag geggteeetg gtgetagaag etggaggtgg agagttggag 300
tggetgttae taetegatet eagggggagg agacaggeae gegatgttg tgttttgtea 360
agcacagatt geaagetegg ggteeagegt aaaceeeaee atgtttggge teaeaeggeg 420
cattttetgg ggaggaeeag eegteaaaaa gegtetagga teeggaaege tgetgtetgg 480
a

<210> 14

<211> 273 <212> DNA

<213> Homo sapiens

<400> 14

gegtecatet tggaegeee tttgttegeg etecaageet eccaettgge eetggetete 60
aegtetgagg eeggagggee ggggatgteg eagtegeeet gggtggeetg tttgtacaag 120
eegtagaeea geagettete etgategete aegggaeeet teagetgett gagggeegeg 180
eagetegaae tecaettgge aeatggggtg gtggaggegg teeetggtge tagaagetgg 240
aggtggagag ttggagtgge tgttactaet ege 273

<210> 15

<211> 20

<212> PRT

<213> Homo sapiens

<400> 15

Gln Ala Thr Gln Gly Asp Cys Asp Ile Pro Gly Pro Pro Ala Ser Asp

1 5 10 15

Val Arg Ala Arg

20

<210> 16

<211> 20

<212> PRT

<213> Homo sapiens

Gln Ala Val Ile Gly Asn Ile Asn Ile Glu Cys Ser Glu Met Leu Glu 1 5 10 15 Leu Lys Gly Lys 20 <210> 17 <211> 20 <212> PRT <213> Homo sapiens <400> 17 Arg Ala Thr Val Gly Asn Ile Lys Thr Glu Arg Pro Gly Met Val Asp 1 5 10 15 Phe Lys Gly Lys 20 <210> 18 <211> 18 <212> PRT <213> Homo sapiens

<400> 16

<400> 18

Arg Ala Thr Val Gly Asn Ile Lys Thr Glu Arg Pro Gly Met Val Asp 1 5 15 10 Phe Lys <210> 19 <211> 20 <212> PRT <213> Homo sapiens <400> 19 Gln Ala Ile Val Gly Asp Ile Asn Ile Ala Cys Pro Gly Met Leu Asp 1 5 10 15 Leu Lys Gly Lys 20 <210> 20 <211> 18 <212> PRT <213> Homo sapiens <400> 20 Gln Ala Ile Val Gly Asp Ile Asn Ile Ala Cys Pro Gly Met Leu Asp 1 5 10 15

Leu Lys

<210> 21

<211> 20

<212> PRT

<213> Homo sapiens

<400> 21

Gln Ala Ile Ile Gly Asp Ile Asn Ile Glu Tyr Leu Gly Met Leu Asp

1 5 10 15

Phe Lys Gly Lys

20

<210> 22

<211> 1593

<212> DNA

<213> Homo sapiens

<400> 22

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ggaccctgta aactttcaag gcctggattt tgggatccta ttggaagata taaatgggat 300 gcttggagtt cactgggtga tatgaccaaa gaggaagcca tgattgcata tgttgaagaa 360 atgaaaaaga ttattgaaac tatgccaatg actgagaaag ttgaagaatt gctgcgtgtc 420 ataggtccat tttatgaaat tgtcgaggac aaaaagagtg gcaggagttc tgatataacc 480 tcagtccgac tggagaaaat ctctaaatgt ttagaagatc ttggtaatgt tctcacttct 540 actccaaacg ccaaaaccgt taatggtaaa gctgaaagca gtgacagtgg agcggagtct 600 gaggaagaag aggcccaaga agaagtgaaa ggagcagaac acagtgataa tgataagaaa 660 atgatgaaga agtcagcaga ccataagaat ttggaagtca ttgtcactaa tggctatgat 720 aaagatgget ttgtteagga tatacagaat gacatteatg ecagttette cetgaatgge 780 agaagcactg aagaagtaaa gcccattgat gaaaacttgg ggcaaactgg aaaatctgct 840 gtttgcattc accaaggtat taatgatgat catgttgaag atgttacagg aattcagcat 900 ttgacaagcg attcagacag tgaagtttac tgtgattcta tggaacaatt tggacaagaa 960 gagtetttag acagetttae gtecaacaat ggaceattte agtattaett gggtggteat 1020 tccagtcaac ccatggaaaa ttctggattt cgtgaagata ttcaagtacc tcctggaaat 1080 ggcaacattg ggaatatgca ggtggttgca gttgaaggaa aaggtgaagt caagcatgga 1140 ggagaagatg gcaggaataa cagcggagca ccacaccggg agaagcgagg cggagaaact 1200 gacgaattet etaatgttag aagaggaaga ggteatagga tgeaacaett gagegaagga 1260 accaagggcc ggcaggtggg aagtggaggt gatggggagc gctgggggctc cgacagaggg 1320 tecegaggea geeteaatga geagategee etegtgetga tgagaetgea ggaggaeatg 1380 cagaatgtcc ttcagagact gcagaaactg gaaacgctga ctgctgcaaa atcatcaaca 1440 tcaacattgc agactgctcc tcagcccacc tcatctcaga gaccatcttg gtggcccttc 1500 gagatgtctc ctggtgtgct aacgtttgcc atcatatggc cttttattgc acagtggttg 1560 gtgtatttat actatcaaag aaggagaagg taa 1593

<210> 23

<211> 530

<212> PRT

<213> Homo sapiens

<400> 23						
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Leu Ile Pro	Ala Asp	Arg Pro	Trp Asp	Arg Gly	Gln His	Trp Gln Leu
	20		25			30
Glu Met Ala	Asp Thr	Arg Ser	Val His	Glu Thr	Arg Phe	Glu Ala Ala
35			40		45	
-	Ile Gln		_	Asn Gly		Gln Pro Thr
50		55			60	
Asn Glu Met	Met Leu	Lve Dhe	Tur Ser	Dhe Tvr	Lve Gln	Ala Thr Glu
65	204	70	1,1 501	75	Lyb Cin	80
Gly Pro Cys	Lys Leu	Ser Arg	Pro Gly	Phe Trp	Asp Pro	Ile Gly Arg
	85			90		95
Tyr Lys Trp	Asp Ala	Trp Ser	Ser Leu	Gly Asp	Met Thr	Lys Glu Glu
	100		105			110
Ala Met Ile	Ala Tyr	Val Glu	Glu Met	Lys Lys	Ile Ile	Glu Thr Met
115			120		125	

Tyr	Glu	Ile	Val	Glu	Asp	Lys	Lys	Ser	Gly	Arg	Ser	Ser	Asp	Ile	Thr
145					150					155					160
Ser	Val	Arg	Leu	Glu	Lys	Ile	Ser	Lys	Cys	Leu	Glu	Asp	Leu	Gly	Asn
				165					170					175	
Val	Leu	Thr	Ser	Thr	Pro	Asn	Ala	Lys	Thr	Val	Asn	Gly	Lys	Ala	Glu
			180					185					190		
_															
Ser	Ser		Ser	Gly	Ala	Glu		Glu	Glu	Glu	Glu		Gln	Glu	Glu
		195					200					205			
1721	T 1 1 G	G]	חות	<b>a</b> 1	77.° -	0	3	•	•		_			_	_
vai	210	GIY	Ala	GIU	HIS	215	Asp	Asn	Asp	гуs		Met	Met	Lys	Lys
	210					213					220				
Ser	Ala	Asp	His	Lvs	Asn	Leu	Glu	Val	Ile	Val	Thr	Asn	Glv	Tvr	Asp
225		-		-	230					235			1	-1-	240
Lys	Asp	Gly	Phe	Val	Gln	Asp	Ile	Gln	Asn	Asp	Ile	His	Ala	Ser	Ser
				245					250					255	
Ser	Leu	Asn	Gly	Arg	Ser	Thr	Glu	Glu	Val	Lys	Pro	Ile	Asp	Glu	Asn
			260					265					270		
Leu	Gly	Gln	Thr	Gly	Lys	Ser	Ala	Val	Cys	Ile	His	Gln	Gly	Ile	Asn
		275					280					285			

Asp	Asp	His	Val	Glu	Asp	Val	Thr	Gly	Ile	Gln	His	Leu	Thr	Ser	Asp
	290					295					300				
Ser	Asp	Ser	Glu	Val	Tyr	Cys	Asp	Ser	Met	Glu	Gln	Phe	Gly	Gln	Glu
305		•			310					315					320
a-1	_	_	_		_,	_,	_					•			
Glu	ser	Leu	Asp		Pne	Tnr	Ser	Asn		GIÀ	Pro	Phe	GIn	_	Tyr
				325					330					335	
Leu	Glv	Glv	His	Ser	Ser	Gln	Pro	Met	Glu	Asn	Ser	Glv	Phe	Ara	Glu
	1	1	340					345			552	<i>1</i>	350	5	024
Asp	Ile	Gln	Val	Pro	Pro	Gly	Asn	Gly	Asn	Ile	Gly	Asn	Met	Gln	Val
		355					360					365			
Val .	Ala	Val	Glu	Gly	Lys	Gly	Glu	Val	Lys	His	Gly	Gly	Glu	Asp	Gly
,	370					375					380				
Arg 2	Asn	Asn	Ser	Gly	Ala	Pro	His	Arg	Glu	Lys	Arg	Gly	Gly	Glu	Thr
385					390					395					400
Asp (	Glu	Phe	Ser	Asn	Val	Arg	Arg	Gly	Arg	Gly	His	Arg	Met	Gln	His
				405					410					415	
_	_								_						
Leu :	Ser	Glu	_	Thr	Lys	Gly	Arg		Val	Gly	Ser	Gly	_	Asp	Gly
			420					425					430		
G1 '	λ	m	<b>C</b> 1	Ca	7.0-	<b>3</b> ec	<b>a</b> 1	0	7	<b>01</b>	0	<b>T</b>	3	al -	<b>01</b> -
Glu A	HI.G	тър	θŢЙ	ser	Asp	arg	σтλ	ser	arg	GТĀ	ser	ьeu	Asn	GIU	GIN

Ile Ala Leu Val Leu Met Arg Leu Gln Glu Asp Met Gln Asn Val Leu
450 455 460

Gln Arg Leu Gln Lys Leu Glu Thr Leu Thr Ala Ala Lys Ser Ser Thr
465 470 475 480

Ser Thr Leu Gln Thr Ala Pro Gln Pro Thr Ser Ser Gln Arg Pro Ser
485 490 495

Trp Trp Pro Phe Glu Met Ser Pro Gly Val Leu Thr Phe Ala Ile Ile
500 505 510

Trp Pro Phe Ile Ala Gln Trp Leu Val Tyr Leu Tyr Tyr Gln Arg Arg
515 520 525

Arg Arg

530

<210> 24

<211> 17

<212> PRT

<213> Homo sapiens

<400> 24

Gln Ala Thr Glu Gly Pro Cys Lys Leu Ser Arg Pro Gly Phe Trp Asp

1

5

10

15

Pro

<210> 25

<211> 273

<212> DNA

<213> Homo sapiens

<400> 25

ccagtatgtc tcaggcgttt gagaaagctg ccaaggatat taagcacctt gagaccaagc 60 cagcagatga tgagaggatg ttcatctaca gccgctgcaa acaagcgact gtgcatgact 120 taaatacaga atggcccagg atgttagacc tcaaaggcaa ggcaaagcag gatgcttgga 180 atgagctgaa agacactgcc aaggaagatg ctgtgaaagc tgatatcaac aaagtagaag 240 agcgaaataa aaaatacaga atataagaga ttg 273

<210> 26

<211> 86

<212> PRT

<213> Homo sapiens

<400> 26

Met Ser Gln Ala Phe Glu Lys Ala Ala Lys Asp Ile Lys His Leu Glu

1

5

10

15

Thr Lys Pro Ala Asp Asp Glu Arg Met Phe Ile Tyr Ser Arg Cys Lys

20 25 30

Gln Ala Thr Val His Asp Leu Asn Thr Glu Trp Pro Arg Met Leu Asp

35 40 45

Leu Lys Gly Lys Ala Lys Gln Asp Ala Trp Asn Glu Leu Lys Asp Thr
50 55 60

Ala Lys Glu Asp Ala Val Lys Ala Asp Ile Asn Lys Val Glu Glu Arg
65 70 75 80

Asn Lys Lys Tyr Arg Ile

85

<210> 27

<211> 20

<212> PRT

<213> Homo sapiens

<400> 27

Gln Ala Thr Val His Asp Leu Asn Thr Glu Trp Pro Arg Met Leu Asp

1 5 10 15

Leu Lys Gly Lys

<210> 28 <211> 315 <212> DNA <213> Homo sapiens <400> 28 atgtggggg acctetgget cetecegeet geetetgeea ateegggeae tgggacagag 60 gctgagtttg agaaagctgc agaggaggtt aggcacctta agaccaagcc atcggatgag 120 gagatgctgt tcatctatgg ccactacaaa caagcaactg tgggcgacat aaatacagaa 180 cggcccggga tgttggactt cacgggcaag gccaagtggg atgcctggaa tgagctgaaa 240 gggacttcca aggaagatgc catgaaagct tacatcaaca aagtagaaga gctaaagaaa 300 aaatacggga tatga 315 <210> 29 <211> 104 <212> PRT <213> Homo sapiens <400> 29 Met Trp Gly Asp Leu Trp Leu Leu Pro Pro Ala Ser Ala Asn Pro Gly 1 5 10 15 Thr Gly Thr Glu Ala Glu Phe Glu Lys Ala Ala Glu Glu Val Arg His 20 25 30

Leu Lys Thr Lys Pro Ser Asp Glu Glu Met Leu Phe Ile Tyr Gly His

Tyr Lys Gln Ala Thr Val Gly Asp Ile Asn Thr Glu Arg Pro Gly Met 50 55 60 Leu Asp Phe Thr Gly Lys Ala Lys Trp Asp Ala Trp Asn Glu Leu Lys 65 70 75 80 Gly Thr Ser Lys Glu Asp Ala Met Lys Ala Tyr Ile Asn Lys Val Glu 85 90 95 Glu Leu Lys Lys Lys Tyr Gly Ile 100 <210> 30 <211> 20 <212> PRT <213> Homo sapiens <400> 30 Gln Ala Thr Val Gly Asp Ile Asn Thr Glu Arg Pro Gly Met Leu Asp 1 5 10 15 Phe Thr Gly Lys 20

<210> 31

<211> 1080

<212> DNA

<213> Homo sapiens

<400> 31

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<210> 32

<211> 359

<212> PRT

<213> Homo sapiens

<40	0> 32	2													
Met	Arg	Ala	Ser	Gln	Lys	Asp	Phe	Glu	Asn	Ser	Met	Asn	Gln	Val	Lys
1				5					10					15	
Leu	Leu	Lys	Lys	Asp	Pro	Gly	Asn	Glu	Val	Lys	Leu	Lys	Leu	Tyr	Ala
			20					25					30		
Leu	Tyr	Lys	Gln	Ala	Thr	Glu	Gly	Pro	Cys	Asn	Met	Pro	Lys	Pro	Gly
		35					40					45			
Val	Phe	Asp	Leu	Ile	Asn	Lys	Ala	Lys	Trp	Asp	Ala	Trp	Asn	Ala	Leu
	50					55					60				
Gly	Ser	Leu	Pro	Lys	Glu	Ala	Ala	Arg	Gln	Asn	Tyr	Val	Asp	Leu	Val
65					70					75					80
Ser	Ser	Leu	Ser	Pro	Ser	Leu	Glu	Ser	Ser	Ser	Gln	Val	Glu	Pro	Gly
				85					90					95	
Thr	Asp	Arg	Lys	Ser	Thr	Gly	Phe	Glu	Thr	Leu	Val	Val	Thr	Ser	Glu
			100					105					110		
Asp	Gly	Ile	Thr	Lys	Ile	Met	Phe	Asn	Arg	Pro	Lys	Lys	Lys	Asn	Ala
		115					120					125			
						-									
Ile	Asn	Thr	Glu	Met	Tyr	His	Glu	Ile	Met	Arg	Ala	Leu	Lys	Ala	Ala

Ser Lys Asp	Asp Ser	Ile Ile	Thr V	al Leu	Thr Gly	Asn Gly	Asp Ty	r
145		150			155		160	0
Tyr Ser Ser	Gly Asn	Asp Leu	Thr A	asn Phe	Thr Asp	Ile Pro	Pro Gl	У
	165			170			175	
Gly Val Glu	Glu Lys	Ala Lys	Asn A	Asn Ala	Val Leu	Leu Arg	Glu Pho	e
	180		1	.85		190		
Val Gly Cys	Phe Ile	Asp Phe		ys Pro	Leu Ile		Val Ası	n
195			200			205		
Gly Pro Ala	Val Gly		Val T	hr Leu	_	Leu Phe	Asp Ala	a
210		215			220			
Val Tyr Ala	Ser Asp	Arg Ala	Thr P	he His	Thr Pro	Phe Ser	His Le	u
225		230			235		240	0
Gly Gln Ser	Pro Glu	Gly Cys	Ser S	Ser Tyr	Thr Phe	Pro Lys	Ile Me	t
	245			250			255	
Ser Pro Ala	Lys Ala	Thr Glu	Met L	eu Ile	Phe Gly	Lys Lys	Leu Th	r
	260		2	65		270		
Ala Gly Glu	Ala Cys	Ala Gln	Gly L	eu Val	Thr Glu	Val Phe	Pro Asp	þ
275			280			285		
Ser Thr Phe	Gln Lys	Glu Val	Trp T	hr Arg	Leu Lys	Ala Phe	Ala Lys	S

290

295

300

Leu Pro Pro Asn Ala Leu Arg Ile Ser Lys Glu Val Ile Arg Lys Arg
305 310 315 320

Glu Arg Glu Lys Leu His Ala Val Asn Ala Glu Glu Cys Asn Val Leu
325 330 335

Gln Gly Arg Trp Leu Ser Asp Glu Cys Thr Asn Ala Val Val Asn Phe
340 345 350

Leu Ser Arg Lys Ser Lys Leu
355

<210> 33

<211> 20

<212> PRT

<213> Homo sapiens

<400> 33

Gln Ala Thr Glu Gly Pro Cys Asn Met Pro Lys Pro Gly Val Phe Asp

Leu Ile Asn Lys

<210> 34

<211> 1574

<212> DNA

<213> Homo sapiens

<220>

<221> misc\_feature

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<223> wherein any n is an a, c, g or t

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<211> 282

<212> PRT

<213> Homo sapiens

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Gly Glu Leu Ser Ser Gly Asp Asp Ser Gly Glu Val Glu Phe Pro His

20 25 30

Ser Pro Glu Ile Glu Glu Thr Ser Cys Leu Ala Glu Leu Phe Glu Lys

35 40 45

Ala Ala Ala His Leu Gln Gly Leu Ile Gln Val Ala Ser Arg Glu Gln
50 55 60

Leu	Leu	Tyr	Leu	Tyr	Ala	Arg	Tyr	Lys	Gln	Val	Lys	Val	Gly	Asn	Cys
65					70					75					80
Asn	Thr	Pro	Lys	Pro	Ser	Phe	Phe	Asp	Phe	Glu	Gly	Lys	Gln	Lys	Trp
				85					90					95	
Glu	Ala	Trp	Lys	Ala	Leu	Gly	Asp	Ser	Ser	Pro	Ser	Gln	Ala	Met	Gln
			100					105					110		
Glu	Tyr	Ile	Ala	Val	Val	Lys	Lys	Leu	Asp	Pro	Gly	Trp	Asn	Pro	Gln
		115					120					125			
Ile	Pro	Glu	Lys	Lys	Gly	Lys	Glu	Ala	Asn	Thr	Gly	Phe	Gly	Gly	Pro
	130					135					140				
Val	Ile	Ser	Ser	Leu	Tyr	His	Glu	Glu	Thr	Ile	Arg	Glu	Glu	Asp	Lys
145					150					155					160
Asn	Ile	Phe	Asp	Tyr	Cys	Arg	Glu	Asn	Asn	Ile	Asp	His	Ile	Thr	Lys
				165					170					175	
Ala	Ile	Lys	Ser	Lys	Asn	Val	Asp	Val	Asn	Val	Lys	Asp	Glu	Glu	Gly
			180					185					190		
Arg	Ala	Leu	Leu	His	Trp	Ala	Cys	Asp	Arg	Gly	His	Lys	Glu	Leu	Val
		195					200					205			

Gly Gln Thr Ala Leu His Tyr Ala Ser Ala Cys Glu Phe Leu Asp Ile Val Glu Leu Leu Gln Ser Gly Ala Asp Pro Thr Leu Arg Asp Gln Asp Gly Cys Leu Pro Glu Glu Val Thr Gly Cys Lys Thr Val Ser Leu Val Leu Gln Arg His Thr Thr Gly Lys Ala <210> 36 <211> 20 <212> PRT <213> Homo sapiens <400> 36 Gln Val Lys Val Gly Asn Cys Asn Thr Pro Lys Pro Ser Phe Phe Asp Phe Glu Gly Lys

Thr Val Leu Leu Gln His Arg Ala Asp Ile Asn Cys Gln Asp Asn Glu

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<223> wherein Xaa is Lys or Arg
<400> 37
Gln Ala Thr Xaa Gly Xaa Xaa Xaa Xaa Xaa Pro Gly Met Leu Asp
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Xaa Lys Gly Xaa

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<210> 38
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<223> wherein Xaa is Glu, Val or Ile
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<223> wherein Xaa is Asp or Pro
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<222> (7)
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<220>
<221> VARIANT
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<223> wherein Xaa is Asn or Lys

<220> <221> VARIANT <222> (9) <223> wherein Xaa is Ile, Leu, Met or Thr <220> <221> VARIANT <222> (10) <223> wherein Xaa is Ser or Pro <220> <221> VARIANT <222> (11) <223> wherein Xaa is Tyr, Trp, Lys or Arg <220> <221> VARIANT <222> (13) <223> wherein Xaa is Gly or Arg <220> <221> VARIANT <222> (14) <223> wherein Xaa is Val or Phe <220> <221> VARIANT

<222> (15)

<223> wherein Xaa is Phe or Trp <220> <221> VARIANT <222> (17) <223> wherein Xaa is Phe or Pro <220> <221> VARIANT <222> (18) <223> wherein Xaa is Lys or Ile <220> <221> VARIANT <222> (20) <223> wherein Xaa is Lys or Arg <400> 38 Gln Ala Thr Xaa Gly Xaa Xaa Xaa Xaa Xaa Pro Xaa Xaa Xaa Asp 1 5 10 15 Xaa Xaa Gly Xaa 20 <210> 39 <211> 20

<212> PRT

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 <223> wherein Xaa is Asp or Pro
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      or Met
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Gln Ala Thr Glu Gly Xaa Cys Xaa Xaa Xaa Xaa Pro Gly Xaa Xaa Asp

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10

15

Xaa Ile Xaa Xaa

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<211> 20

<212> PRT

<213> Homo sapiens

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<222> (11) <223> wherein Xaa is Cys, Arg or Lys <220> <221> VARIANT <222> (13) <223> wherein Xaa is Gly, Glu or Ser <220> <221> VARIANT <222> (16) <223> wherein Xaa is Asp or Glu <220> <221> VARIANT <222> (18) <223> wherein Xaa is Thr, Lys or Glu <400> 40 Gln Ala Xaa Xaa Gly Asn Ile Asn Xaa Glu Xaa Pro Xaa Met Leu Xaa 1 5 10 15 Phe Xaa Gly Lys 20

<211> 19

<210> 41

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<213> Homo sapiens
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<223> wherein Xaa is Ala, Ile, Thr, Val, Phe, Leu or Met
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<223> wherein Xaa is any amino acid
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<223>	wherein Xaa is Asp or Glu
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<222>	(16)
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<223>	wherein Xaa is any amino acid
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1	5 10 15
1	5 10 15
	5 10 15
	ly Lys
Xaa G	ly Lys
Xaa G	ly Lys 42 20
<pre>Xaa G &lt;210&gt; &lt;211&gt; &lt;212&gt;</pre>	ly Lys 42 20
<pre>Xaa G &lt;210&gt; &lt;211&gt; &lt;212&gt;</pre>	ly Lys  42 20 PRT
<pre>Xaa G &lt;210&gt; &lt;211&gt; &lt;212&gt;</pre>	ly Lys  42 20 PRT
<210> <211> <212> <213>	ly Lys  42 20 PRT

<223> wherein Xaa is Asp, Asn or Pro <220> <221> VARIANT <222> (7) <223> wherein Xaa is Ile or Cys <220> <221> VARIANT <222> (9) <223> wherein Xaa is Thr, Ile, Met or Leu <220> <221> VARIANT <222> (10) <223> wherein Xaa is any amino acid <220> <221> VARIANT <222> (11) <223> wherein Xaa is Arg or Lys <220> <221> VARIANT <222> (14) <223> wherein Xaa is Met, Val or Phe

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<221> VARIANT <222> (15) <223> wherein Xaa is any amino acid <220> <221> VARIANT <222> (17) <223> wherein Xaa is Phe or Leu <220> <221> VARIANT <222> (18) <223> wherein Xaa is any amino acid <220> <221> VARIANT <222> (20) <223> wherein Xaa is Lys or Arg <400> 42 Gln Ala Thr Val Gly Xaa Xaa Asn Xaa Xaa Xaa Pro Gly Xaa Xaa Asp 1 10 15

Xaa Xaa Gly Xaa

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<210> 43

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<223> wherein Xaa is Met or Ala

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Gln Ala Thr Val Gly Asp Xaa Asn Ile Xaa Xaa Pro Xaa Xaa Xaa Asp

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5

10

15

Xaa Xaa Xaa Xaa

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<210> 44

<211> 20

<212> PRT

<213> Homo sapiens

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<223> wherein Xaa is any amino acid

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<223> wherein Xaa is any amino acid

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<223> wherein Xaa is Asn, Asp or Pro

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<223> wherein Xaa is Gly, Glu or Ser

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Xaa Xaa Gly Lys

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<210> 45
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<223> wherein Xaa is any amino acid
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<222> (18)
<223> wherein Xaa is any amino acid
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1 5 10 15

Phe Xaa Gly Lys

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<210> 46

<211> 687

<212> DNA

<213> Homo sapiens

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<211> 228

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Ala Lys Trp Glu Ala Trp Ser Ala Asn Lys Gly Ala Ser Lys Met Asp

Ala Met Arg Gly Tyr Ala Ala Lys Val Glu Glu Leu Thr Lys Lys Glu Val Gly Gly Val Glu Arg Glu Gln Arg Gly Val Gln Asp Gly Arg His Glu Gly Leu Arg Gly Gln Ser Gly Gly Ala Asp Glu Glu Gly Arg Ala Ser Lys Met Asp Ala Met Arg Gly Tyr Ala Ala Lys Val Glu Glu Leu Thr Lys Lys Glu Val Gly Gly Val Glu Arg Glu Gln Arg Gly Val Gln Asp Gly Arg His Glu Gly Leu Arg Gly Gln Ser Glu Glu Met Arg Lys Lys Glu Ala Gly <210> 48 <211> 576 <212> DNA <213> Homo sapiens

<400> 48

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<211> 191

<212> PRT

<213> Homo sapiens

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Leu Arg Pro Ala Pro Pro Thr Ala Ser Ala Ala His Ala Ser Pro His

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Glu Arg Ala Arg Gln Ala Ser Arg Ala Phe Arg Gln Ser Pro Pro Thr

35 40 45

Ser Pro Gln Leu Leu Ala Pro Gly Thr Ala Ser Thr Thr Pro Cys Ala

50 55 60

Lys	Trp	Ser	Ser	Ser	Cys	Ala	Ala	Leu	Lys	Gln	Leu	Lys	Gly	Pro	Val
65					70					75					80
Ser	Asp	Gln	Glu	Lys	Leu	Leu	Val	Tyr	Gly	Leu	Tyr	Lys	Gln	Ala	Thr
				85					90					95	
Gln	Gly	Asp	Cys	Asp	Ile	Pro	Gly	Pro	Pro	Ala	Ser	Asp	Val	Arg	Ala
			100					105					110		
Arg	Ala	Lys	Trp	Glu	Ala	Trp	Ser	Ala	Lys	Lys	Gly	Ala	Ser	Lys	Met
		115					120					125			
Asp	Ala	Met	Arg	Gly	Tyr	Ala	Ala	Lys	Val	Glu	Glu	Leu	Thr	Lys	Lys
	130					135					140				
Glu	Val	Gly	Gly	Val	Glu	Arg	Glu	Gln	Arg	Gly	Val	Gln	Asp	Gly	Arg
145					150					155					160
His	Glu	Gly	Leu	Arg	Gly	Gln	Ser	Gly	Gly	Ala	Asp	Glu	Glu	Gly	Ser
				165					170					175	
Gly	Gly	Arg	Gly	Ala	Arg	Thr	Lys	Gly	Arg	Pro	Arg	Trp	Thr	Pro	
			180					185					190		

<211> 294

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<212> DNA

<213> Homo sapiens

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<210> 51

<211> 293

<212> DNA

<213> Homo sapiens

<400> 51

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<210> 52

<211> 85

<212> PRT

<213> Homo sapiens

<400> 52

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Ala	Val	Ile	Gly	Asn	Ile	Asn	Ile	Glu	Cys	Ser	Glu	Met	Leu	Glu	Leu
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Lys	Gly	Lys	Ala	Lys	Trp	Glu	Ala	Gln	Asn	Pro	Gln	Lys	Gly	Leu	Ser
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Glu	Glu	Asp	Met	Met	Arg	Ala	Phe	Ile	Ser	Lys	Ala	Glu	Glu	Leu	Ile
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Glu	Lys	Tyr	Gly	Ile											
				85											
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<213	> Ho	mo s	apie	ns											
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Gln Ala Asp Phe Asp Met Val Thr Glu Asp Val Arg Lys Leu Lys Thr

Arg	Pro	Thr	Asp	Glu	Glu	Leu	Lys	Glu	Leu	Tyr	Gly	Phe	Tyr	Lys	Gln
			20					25					30		
Ala	Thr	Val	Gly	Asp	Ile	Asn	Ile	Glu	Cys	Pro	Gly	Met	Leu	Asp	Leu
		35					40					45			
Lys		Lys	Ala	Lys	Trp		Ala	Trp	Asn	Leu	Lys	Lys	Gly	Ile	Ser
	50					55					60				
T	<b>0</b> 1	•			_										
ьуs 65	GIU	Asp	Ala	Met		Ala	Tyr	Ile	Ser		Ala	Lys	Thr	Met	
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Glu	Lve	Tyr	Glv	Tla											
	_,,	-7-	Cly	85											
				03											
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Ser	Gln	Ala	Glu	Phe	Glu	Lys	Ala	Ala	Glu	Glu	Val	Lys	Asn	Leu	Lys
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Thr	Lys	Pro	Ala	Asp .	Asp	Glu :	Met	Leu	Phe	Ile	Tyr	Ser	His	Tyr	Lys
			20					25					30		

GIII	ı Ala	Inr	vai	GIY	Asp	TTE	Asn	inr	GIU	Arg	Pro	GIY	Ile	Leu	Asp
		35					40					45			
Leu	Lys	Gly	Lys	Ala	Lys	Trp	Asp	Ala	Trp	Asn	Glv	Leu	Lvs	Glv	Thr
	50		_		-	55	-		•		60		-1-	1	
						33					80				
_	_														
		Glu	Asp	Ala	Met	Lys	Ala	Tyr	Ile	Asn	Lys	Val	Glu	Glu	Leu
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Lys	Lys	Lys	Tyr	Gly	Ile										
				85											
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	2> PI														
<21.	3> Ho	omo s	sapı	ens											
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Ser	Gln	Ala	Glu	Phe	Asp	Lys	Ala	Ala	Glu	Glu	Val	Lys	His	Leu	Lys
1				5					. 10					15	
Thr	Lys	Pro	Ala	Asp	Glu	Glu	Met	Leu	Phe	Ile	Tyr	Ser	His	Tyr	Lys
			20					25			-		30	-	•
													50		
G] ~	<b>λ</b> 1 ~	Th~	17 ~ 1	C1	λ a	T1-	7 ~	mb	<b>a</b> 1	3	D	<b>~</b> 1		_	_
GIII	Ala		val	ату	Азр	TTE		inr	GIU	arg	Pro	GТĀ	Met	ьeu	Asp
		35					40					4 5			

Phe	Lys	Gly	Lys	Ala	Lys	Trp	Asp	Ala	Trp	Asn	Glu	Leu	Lys	Gly	Thr
	50					55					60				
Ser	Lys	Glu	Asp	Ala	Met	Lys	Ala	Tyr	Ile	Asp	Lys	Val	Glu	Glu	Leu
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Lys	Lys	Lys	Tyr	Gly	Ile										
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			20					25					30		
Gln	Ala	Thr	Val	Gly	Asp	Ile	Asn	Thr	Glu	Arg	Pro	Gly	Met	Leu	Asp
		35					40					45			
Phe	Thr	Gly	Lys	Ala	Lys	Trp	Asp	Ala	Trp	Asn	Glu	Leu	Lys	Gly	Thr
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Ser Lys Glu Asp Ala Met Lys Ala Tyr Ile Asn Lys Val Glu Glu Leu Lys Lys Lys Tyr Gly Ile <210> 57 <211> 88 <212> PRT <213> Homo sapiens <400> 57 Met Ser Leu Gln Ala Asp Phe Asp Met Val Thr Glu Asp Val Arg Lys Leu Lys Thr Arg Pro Asp Asp Glu Glu Leu Lys Glu Leu Tyr Gly Leu Tyr Lys Gln Ala Val Ile Gly Asn Ile Asn Ile Glu Cys Ser Glu Met Leu Glu Leu Lys Gly Lys Ala Lys Trp Glu Ala Gln Asn Pro Gln Lys Gly Leu Ser Glu Glu Asp Met Met Arg Ala Phe Ile Ser Lys Ala Glu 

Glu Leu Ile Glu Lys Tyr Gly Ile

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<210> 58

<211> 82

<212> PRT

<213> Homo sapiens

<400> 58

Lys Arg Cys Ala Gly Ile Lys His Phe Lys Thr Lys Pro Ala Asp Asp

5 10 15

Glu Met Arg Phe Leu Tyr Gly His Tyr Lys Arg Ala Thr Val Gly Asn

20 25 30

Ile Lys Thr Glu Arg Pro Gly Met Val Asp Phe Lys Gly Lys Ala Lys

35 40 45

Trp Asp Pro Trp Asn Leu Val Lys Gly Ala Ala Arg Glu Asp Pro Met

50 55 60

Lys Ala Lys Ala Tyr Val Lys Lys Val Glu Glu Leu Lys Lys Phe

65 70 75 80

Arg Ile

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<210> 60

<211> 91

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<210> 61

<211> 89

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<213> Homo sapiens

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<213> Homo sapiens

<211> 138

<212> PRT

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Trp	His	Ala	Ala	Val	Ile	Thr	Ala	Ala	Arg	Glu	Ala	Glu	Ala	Glu	Asn
			20					25					30		
His	Leu		Trp	Glu	Glu	Lys	Lys	Lys	Lys	Lys	Arg	Cys	Ala	Gly	Ile
		35					40					45			
_		_,	_		_										
Lys		Phe	Lys	Thr	Lys		Ala	Asp	Asp	Glu	Met	Arg	Phe	Leu	Tyr
	50					55					60				
G] v	Wi c	T-1	Tira	7.22	77.	m\	**- 3	<b>~</b> 3.	_		_				
65 65	urs	ıyı	гуѕ	Arg		THE	vaı	GIÀ	Asn	Ile	Lys	Thr	Glu	Arg	
05					70					75					80
Glv	Met	Val	Asp	Phe	Lvs	Glv	Lve	בומ	Lve	Trp	7 an	Dro	Пана	7	T
4			~	85	272	Cly	цуз	ALG	90	115	Asp	PLO	пр		Leu
									<b>J</b>					95	
Val	Lys	Gly	Ala	Ala	Arg	Glu	Asp	Pro	Met	Lys	Ala	Lvs	Ala	Tur	Val
			100				•	105					110	-7-	vai
[sze	Luc	Va l	C1	<b>~</b> 1	T	T	<b>.</b>	<b>-</b>	<b>-</b> 1	_		_			

 Lys
 Val
 Glu
 Leu
 Lys
 Lys
 Lys
 Phe
 Arg
 Ile
 Arg
 Glu
 Thr
 Gly

 Ile
 Val
 Ala
 Ser
 His
 Ala
 Phe
 Val
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 Asn

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 135
 135
 135
 Leu
 Asn

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<210> 64

<211> 86

Page 71

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<212> DNA

<213> Homo sapiens

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<210> 66

<211> 256

<212> DNA

<213> Homo sapiens

<400> 66

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<210> 67

<211> 258

<212> DNA

<213> Homo sapiens

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<210> 68

<211> 259

<212> DNA

<213> Homo sapiens

<400> 68

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<210> 69

<211> 88

<212> PRT

<213> Homo sapiens

5

<400> 69

1

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10

15

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20 25 30

Tyr Lys Gln Ala Ile Val Gly Asp Ile Asn Ile Ala Cys Pro Gly Met

40

45

Leu Asp Leu Lys Gly Lys Ala Lys Trp Glu Ala Trp Asn Leu Lys Lys
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Glu Leu Ile Glu Lys Tyr Gly Ile

85

<210> 70

<211> 89

<212> PRT

<213> Homo sapiens

<400> 70

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20 25 30

Phe Tyr Lys Gln Ala Thr Val Gly Asp Ile Asn Ile Glu Cys Pro Gly

35 40 45

Met Leu Asp Leu Lys Gly Lys Ala Lys Trp Glu Ala Trp Asn Leu Lys

55

60

Lys Gly Ile Ser Lys Glu Asp Ala Met Asn Ala Tyr Ile Ser Lys Ala 65 70 75 80

Lys Thr Met Val Glu Lys Tyr Gly Ile

85

<210> 71

<211> 85

<212> PRT

<213> Homo sapiens

<400> 71

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Arg Pro Asp Asp Gly Glu Leu Lys Glu Leu Tyr Gly Leu Tyr Lys Gln
20 25 30

Ala Ile Val Gly Asp Ile Asn Ile Ala Cys Pro Gly Met Leu Asp Leu
35 40 45

Lys Gly Lys Ala Lys Trp Glu Ala Trp Asn Leu Lys Lys Gly Leu Ser
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75

80

Glu Lys Tyr Gly Ile

85

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<213> Homo sapiens

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<221> VARIANT

<222> (6)

<223> wherein Xaa is any amino acid

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<221> VARIANT

<222> (9)

<223> wherein Xaa is any amino acid

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<223> wherein Xaa is any amino acid

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Lys	Pro	Thr	Asp	Asp	Glu	Leu	Lys	Glu	Leu	Tyr	Gly	Leu	Tyr	Lys	Gln
			20					25					30		
Ser	Thr	Val	Gly	Asp	Ile	Asn	Ile	Glu	Cys	Pro	Gly	Met	Leu	Asp	Leu
		35					40					45			
Lys	Gly	Lys	Ala	Lys	Trp	Asp	Ala	Trp	Asn	Leu	Lys	Lys	Gly	Leu	Ser
	50					55					60				
Lys	Glu	Asp	Ala	Met	Ser	Ala	Tyr	Val	Ser	Lys	Ala	His	Glu	Leu	Ile
					70					2.5					
65					70					75					80
65					70					/5					80
	Lys	Tyr	Gly	Leu	70					/5					80
	Lys	Tyr	Gly	Leu 85	70					/5					80
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Glu	Lys )> 74		Gly		70					75					80
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Glu <210 <211	)> 74	<u>.</u>	Gly		70					75					80
Glu <210 <211 <212	)> 74 -> 96 ?> PR	i T	Gly	85	70					75					80
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<pre>&lt;210 &lt;211 &lt;212 &lt;213</pre>	)> 74 -> 96 ?> PR 3> Hc	e T	apie	85		Cys	Leu	Phe	Phe		Lys	Ala	Asp	Phe	

2	20	25	30
Glu Leu Lys G	lu Leu Tyr Gl	ly Leu Tyr Lys (	Gln Ala Ile Val Gly Asp
35		40	45
Ile Asn Ile Al	la Cvs Pro Gl	lv Met Leu Asp 1	Leu Lys Gly Lys Ala Lys
50		55	60
55	-	33	80
Trong Class Blooms	3 T T.		
		ys Lys Gly Leu s	Ser Thr Glu Asp Ala Thr
65	70		75 80
Ser Ala Tyr Il	le Ser Lys Al	la Lys Glu Leu I	Ile Glu Lys Tyr Gly Ile
	85	90	95
<210> 75			
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<213> Frog			
5			
<400> 75			
	מ או אמ או א	o han Isra his h	Na Clarke W. 3 To 1
			Ala Gly Asp Val Lys Lys
1	5	10	15

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Leu Lys Thr Lys Pro Thr Asp Asp Glu Leu Lys Glu Leu Tyr Gly Leu	1
20 25 30	
Tyr Lys Gln Ser Thr Val Gly Asp Ile Asn Ile Glu Cys Pro Gly Met	:
35 40 45	
`	
Leu Asp Leu Lys Gly Lys Ala Lys Trp Asp Ala Trp Asn Leu Lys Lys	;
50 55 60	
Gly Leu Ser Lys Glu Asp Ala Met Ser Ala Tyr Val Ser Lys Ala His	
65 70 75 80	i
Glu Leu Ile Glu Lys Tyr Gly Leu	
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Lys Gln Ala	Thr	Val	Gly	Asp	Ile	Asn	Ile	Glu	Cys	Pro	Gly	Met	Leu
50				55					60				
Asp Leu Lys	Gly	Lys	Ala	Lys	Trp	Glu	Ala	Trp	Asn	Leu	Lvs	Lvs	Glv
65	-	_	70	-	•			75			-1-	-2-	80
								. •					00
Ile Ser Lys	Glu	Asp	Ala	Met	Asn	Δla	Tvr	Tle	Ser	Lve	בומ	Lve	Thr
		85					90	110	JCI	цу	ALG		1111
		03					30					95	
Met Val Clu	T 1.00	TT	<b>a</b> 1	T] ^									
Met Val Glu	_	ıyr	сту	TTE									
	100												
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1		5					10					15	
Lys Thr Lys	Pro	Ser .	Asp	Glu	Glu	Met	Leu	Phe	Ile	Tyr	Glv	His	Tvr
•	20		-			25			- <del>-</del>		30		- <b>, -</b>

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35 40 45

Asp Phe Thr Gly Lys Ala Lys Trp Asp Ala Trp Asn Glu Leu Lys Gly
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Thr Ser Lys Glu Asp Ala Met Lys Ala Tyr Ile Asn Lys Val Glu Glu 65 70 75 80

Leu Lys Lys Lys Tyr Gly Ile

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<211> 274

<212> DNA

<213> Homo sapiens

<400> 78

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<210> 79

<211> 271

<212> DNA

<213> Homo sapiens

<400> 79

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<210> 80

<211> 262

<212> DNA

<213> Homo sapiens

<400> 80

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aataaagaac tgaaaaaact egatggaett tacaaacaag etataattgg agacattaat 120
attgagtate tgggaatget ggaetttaag ggeaaggeea aatgegeage atggaeeete 180
caaaaaaggt tgteaaagga agatgeaacg agtgteteta tttetaagge aaaagageeg 240
atagaaaaat aggaeattta ga

<210> 81

<211> 260

<212> DNA

<213> Homo sapiens

<400> 81

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<210> 82

<211> 86

<212> PRT

<213> Homo sapiens

<400> 82

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Leu Pro Thr Arg Pro Ala Asp Asn Lys Glu Leu Lys Lys Leu Asp Gly
20 25 30

Leu Tyr Lys Gln Ala Ile Ile Gly Asp Ile Asn Ile Glu Tyr Leu Gly

35 40 45

Met Leu Asp Phe Lys Gly Lys Ala Lys Cys Ala Ala Trp Thr Leu Gln
50 55 60

Lys Arg Leu Ser Lys Glu Asp Ala Thr Ser Val Ser Ile Ser Lys Ala
65 70 75 80

Lys Glu Pro Ile Glu Lys

<210> 83 <211> 85 <212> PRT <213> Homo sapiens <400> 83 Met Ser Pro Gln Ala Asp Phe Asp Lys Ala Ala Gly Asp Val Lys Lys Leu Lys Thr Lys Pro Thr Asp Asp Glu Leu Lys Glu Leu Tyr Gly Leu Tyr Lys Gln Ser Thr Val Gly Asp Ile Asn Ile Glu Cys Pro Gly Met Leu Asp Leu Lys Gly Lys Ala Lys Trp Asp Ala Trp Asn Leu Lys Lys Gly Leu Ser Lys Glu Asp Ala Met Ser Ala Tyr Val Ser Lys Ala His 

Glu Leu Ile Glu Lys

<211> 88 <212> PRT <213> Frog <400> 84 Met Ser Pro Gln Ala Asp Phe Asp Lys Ala Ala Gly Asp Val Lys Lys 1 5 10 15 Leu Lys Thr Lys Pro Thr Asp Asp Glu Leu Lys Glu Leu Tyr Gly Leu 20 25 30 Tyr Lys Gln Ser Thr Val Gly Asp Ile Asn Ile Glu Cys Pro Gly Met 35 40 45 Leu Asp Leu Lys Gly Lys Ala Lys Trp Asp Ala Trp Asn Leu Lys Lys 50 55 60 Gly Leu Ser Lys Glu Asp Ala Met Ser Ala Tyr Val Ser Lys Ala His 65 70 75 80 Glu Leu Ile Glu Lys Tyr Gly Leu 85 <210> 85 <211> 103 <212> PRT

<210> 84

<213> Duck

<400> 85

Met Phe Gln Ala His Leu Leu Arg Gly Thr Leu Thr Leu Ser Phe Phe 1 5 10 15

Leu His Gln Ala Asp Phe Asp Glu Ala Ala Glu Glu Val Lys Lys Leu
20 25 30

Lys Thr Arg Pro Thr Asp Glu Glu Leu Lys Glu Leu Tyr Gly Phe Tyr

35. 40 45

Lys Gln Ala Thr Val Gly Asp Ile Asn Ile Glu Cys Pro Gly Met Leu
50 55 60

Asp Leu Lys Gly Lys Ala Lys Trp Glu Ala Trp Asn Leu Lys Lys Gly
65 70 75 80

Ile Ser Lys Glu Asp Ala Met Asn Ala Tyr Ile Ser Lys Ala Lys Thr

Met Val Glu Lys Tyr Gly Ile

100

<210> 86

<211> 87

<212> PRT

<213> Homo sapiens

<400> 86

Met Ser Gln Ala Glu Phe Glu Lys Ala Ala Glu Glu Val Arg His Leu

1 5 10 15

Lys Thr Lys Pro Ser Asp Glu Glu Met Leu Phe Ile Tyr Gly His Tyr
20 25 30

Lys Gln Ala Thr Val Gly Asp Ile Asn Thr Glu Arg Pro Gly Met Leu

35 40 45

Asp Phe Thr Gly Lys Ala Lys Trp Asp Ala Trp Asn Glu Leu Lys Gly
50 55 60

Thr Ser Lys Glu Asp Ala Met Lys Ala Tyr Ile Asn Lys Val Glu Glu 65 70 75 80

Leu Lys Lys Tyr Gly Ile

85

<210> 87

<211> 86

<212> PRT

<213> Homo sapiens

<400> 87

1				5					10					15	5
Leu	Pro	Thr	Arg	Pro	Ala	Asp	Asn	Lys	Glu	Leu	Lys	Lys	Leu	. Asp	Gly
			20					25					30		
Leu	Tyr	Lys	Gln	Ala	Ile	Ile	Gly	Asp	Ile	Asn	Ile	Glu	Tyr	Leu	Gly
		35					40					45			
Met	Leu	Asp	Phe	Lys	Gly	Lys	Ala	Lys	Cys	Ala	Ala	Trp	Thr	Leu	Gln
	50					55					60	_			
Lys	Arg	Leu	Ser	Lys	Glu	Asp	Ala	Thr	Ser	Val	Ser	Ile	Ser	Lys	Ala
65					70					75				•	80
Lys	Glu	Pro	Ile	Glu	Lys										
				85	-										
<210	D> 88	<b>.</b>													
	L> 53														
	2> PR														
	3> Ho		anie	me											
			up I C												
<400	)> 88														
			Dha	T7	71-	<b>01</b>	0	<b></b> .	~1	_	_	_	_		
	Phe	GIII	FIIG		AId	дту	ser	пр		ser	rrp	cys	cys		Cys
1				5					10					15	

Met Ala Leu Gln Ala Glu Phe Asp Lys Ala Ala Glu Asp Val Arg Lys

Leu Ile	Pro	Ala	Asp	Arg	Pro	Trp	Asp	Arg	Gly	Gln	His	Trp	Gln	Leu
		20					25					30		
Glas Mak	21-	<b>3</b>	mle		0	··- 1	•••	<b>~</b> 1	-1	_	_,	<b>~</b> 1		- 3
Glu Met		Asp	Thr	Arg	ser		HIS	GIu	Thr	Arg		GIu	Ala	Ala
	35					40					45			
Well Too	77 J	<b>T</b> 1 -	<b>93</b>		•				<b>~</b> 3	_	_,	~-3	_	_,
Val Lys	vai	ше	GIN	ser		Pro	гуѕ	Asn	GIY		Pne	GIn	Pro	Thr
50					55			-		60				
Asn Glu	Met	Met	Len	Lve	Dhe	<b>Тъг</b>	50×	Dho	Ψ	T 120	Cl n	ת דת	ሞኮ~	C1
65	Mec	Mec	Leu	дуS 70	FIIC	TYL	261	PILE	75	пуs	GIII	Ата	IIII	
03				, 0					/3					80
Gly Pro	Cvs	Lvs	T.e.i	Ser	Δτα	Pro	Glv	Dhe	Тт	Aen	Pro	Tle	Glar	λνα
017 110	CID	272	85	JCI	AL 9	110	Gry	90	110	тэр	FIO	116	95	Arg
			03					50					93	
Tyr Lys	Trp	Asp	Ala	Tro	Ser	Ser	T <sub>i</sub> en	Glv	Asn	Met	Thr	Lvs	Glu	Glu
-77-		100					105	027	· ·····		****	110	oru.	oru
Ala Met	Ile	Ala	Tyr	Val	Glu	Glu	Met	Lvs	Lvs	Ile	Ile	Glu	Thr	Met
	115		-			120		•	4		125			
Pro Met	Thr	Glu	Lys	Val	Glu	Glu	Leu	Leu	Arg	Val	Ile	Gly	Pro	Phe
130					135					140		_		
Tyr Glu	Ile	Val	Glu	Asp	Lys	Lys	Ser	Gly	Arg	Ser	Ser	Asp	Ile	Thr
145				150					155					160
Ser Val	Arg	Leu	Glu	Lys	Ile	Ser	Lys	Cys	Leu	Glu	Asp	Leu	Gly	Asn

Val	Leu	Thr	Ser	Thr	Pro	Asn	Ala	Lys	Thr	Val	Asn	Gly	Lys	Ala	Glu	
			180					185					190			
Ser	Ser	Δsn	Ser	Glv	λla	Glu	Sor	Clu	C1.,	C1	C1.,	71-	<b>01</b> -	<b>01</b>	Glu	
501			DCI	Gry	AIG	Giu		Giu	GIU	GIU	GIU	ALA	GIII	GIU	GIU	
		195					200					205				
Val	Lys	Gly	Ala	Glu	His	Ser	Asp	Asn	Asp	Lys	Lys	Met	Met	Lys	Lys	
	210					215				_				-	•	
	210					215					220					
Ser	Ala	Asp	His	Lys	Asn	Leu	Glu	Val	Ile	Val	Thr	Asn	Gly	Tyr	Asp	
225					230					235					240	
Lys	Asp	Gly	Phe	Val	Gln	Asp	Ile	Gln	Asn	Asp	Ile	His	Ala	Ser	Ser	
				245					250					255		
Ser	Lau	λan	C111	7 ~~	Cor	mb sc	<b>01.</b>	<b>01</b>	**- 1	<b>.</b>	<b>5</b>	-1	_	~-3	_	
PET	Leu	ASII	GIÀ	Arg	ser	rnr	GIU	GIU	vaı	гуѕ	Pro	īīe	Asp	Glu	Asn	
			260					265					270			

Leu Gly Gln Thr Gly Lys Ser Ala Val Cys Ile His Gln Gly Ile Asn 

Asp Asp His Val Glu Asp Val Thr Gly Ile Gln His Leu Thr Ser Asp 

Ser Asp Ser Glu Val Tyr Cys Asp Ser Met Glu Gln Phe Gly Gln Glu 

Glu	Ser	Leu	Asp	Ser	Phe	Thr	Ser	Asn	Asn	Gly	Pro	Phe	Gln	Tyr	Tyr
				325					330					335	
Leu	Gly	Gly	His	Ser	Ser	Gln	Pro	Met	Glu	Asn	Ser	Gly	Phe	Arg	Glu
			340					345					350		
Asp	Ile	Gln	Val	Pro	Pro	Gly	Asn	Gly	Asn	Ile	Gly	Asn	Met	Gln	Val
		355					360					365			
Val	Ala	Val	Glu	Gly	Lys	Gly	Glu	Val	Lys	His	Gly	Gly	Glu	Asp	Gly
	370					375					380				
Arg	Asn	Asn	Ser	Glv	Ala	Pro	His	Ara	Glu	Lve	Ara	Glv	Glv	Glu	Thr
385				1	390			5	ozu	395	mg	Cly	Cly	Giu	400
Asp	Glu	Phe	Ser	Asn	Val	Arg	Arg	Gly	Arg	Gly	His	Arg	Met	Gln	His
				405					410					415	
Leu	Ser	Glu	Gly	Thr	Lys	Gly	Arg	Gln	Val	Gly	Ser	Gly	Gly	Asp	Gly
			420					425					430	_	_
Glu	Arg		Gly	Ser	Asp	Arg		Ser	Arg	Gly	Ser		Asn	Glu	Gln
		435					440					445			
Ile	Ala	Leu	Val	Leu	Met	Arg	Leu	Gln	Glu	Asp	Met	Gln	Asn	Val	Leu
	450					455					460				

Gln Arg Leu Gln I	ys Leu Glu	Thr Leu Thr	Ala Ala Lys Se	r Ser Thr
465	470		475	480
Ser Thr Leu Gln T	hr Ala Pro	Gln Pro Thr	Ser Ser Gln Ar	g Pro Ser
4	85	490		495
Trp Trp Pro Phe G	lu Met Ser	Pro Gly Val	Leu Thr Phe Ala	a Ile Ile
500		505	51	0
Trp Pro Phe Ile A	la Gln Trp		Leu Tyr Tyr Gli	n Arg Arg
515		520	525	
-				
Arg Arg				
530				
<210> 89				
<211> 530				
<212> PRT				
<213> Homo sapien	s			
<400> 89				
Met Phe Gln Phe H	is Ala Gly	Ser Trp Glu	Ser Trp Cys Cys	Cys Cys
1	5	10		15
Cys Leu Ile Pro G	ly Asp Arg	Pro Trp Asp	Arg Gly Arg Arg	Trp Arg
20		25	30	ı

Leu	Glu	Met	Arg	His	Thr	Arg	Ser	Val	His	Glu	Thr	Arg	Phe	Glu	Ala
		35					40					45			
Ala	Val	Lys	Val	Ile	Gln	Ser	Leu	Pro	Lys	Asn	Gly	Ser	Phe	Gln	Pro
	50					55					60				
<b>~</b> 1		~1													
	Asn	GIu	Met	Met		Lys	Phe	Tyr	Ser		Tyr	Lys	Gln	Ala	
65					70					75					80
Glu	Glv	Pro	Cvs	Lvs	Leu	Ser	Lvs	Pro	Glv	Dhe	Trn	λen	Pro	Val	Gly
	1		0,70	85		501	2,5	110	90	1110	111	лор	PIO	95	GIY
									50					73	
Arg	Tyr	Lys	Trp	Asp	Ala	Trp	Ser	Ser	Leu	Gly	Asp	Met	Thr	Lys	Glu
			100					105					110		
Glu	Ala	Met	Ile	Ala	Tyr	Val	Glu	Glu	Met	Lys	Lys	Ile	Leu	Glu	Thr
		115					120					125			
Met	Pro	Met	Thr	Glu	Lys	Val	Glu	Glu	Leu	Leu	His	Val	Ile	Gly	Pro
	130					135					140				
Phe	Tyr	Glu	Ile	Val	Glu	Asp	Lys	Lys	Ser	Gly	Arg	Ser	Ser	Asp	Leu
145					150					155					160
Thr	Ser	Val	Arg	Leu	Glu	Lys	Ile	Ser	Lys	Cys	Leu	Glu	Asp	Leu	Gly
				165					170					175	

Asn Val Leu Ala Ser Thr Pro Asn Ala Lys Thr Val Asn Gly Lys Ala

Glu	Ser	Ser	Asp	Ser	Gly	Ala	Glu	Ser	Glu	Glu	Glu	Ala	Ala	Gln	Glu
		195					200					205			
Asp	Pro	Lvs	Ara	Pro	Glu	Pro	λνα	A en	Ser	λαη	Tura	T 110	Mot	Mo =	Lys
		2,5	9	110	Olu		Arg	Asp	361	ASP		пуъ	Mec	Mec	гÀг
	210					215					220				
Lys	Ser	Ala	Asp	His	Lys	Asn	Leu	Glu	Ile	Ile	Val	Thr	Asn	Gly	Tyr
225					230					235					240
Asp	Lvs	Asp	Ser	Phe	Val	Gln	Glv	Val	Gln	Δsn	Ser	Tle	Hic	ሞb v	Ser
•	•	- 1		245			<b>U</b> -1			11011	501	110	1113		Ser
				245					250					255	
Pro	Ser	Leu	Asn	Gly	Arg	Cys	Thr	Glu	Glu	Val	Lys	Ser	Val	Asp	Glu
			260					265				٠	270		
Asn	Leu	Glu	Gln	Thr	Gly	Lys	Thr	Val	Val	Phe	Val	His	Gln	Asp	Val
		275			•	-3-	280						02		vai
		2/3					200					285			
Asn	Ser	Asp	His	Val	Glu	Asp	Ile	Ser	Gly	Ile	Gln	His	Leu	Thr	Ser
	290					295					300				
Asp	Ser	Asp	Ser	Glu	Val	Tyr	Cys	Asp	Ser	Met	Glu	Gln	Phe	Gly	Gln

Glu Glu Ser Leu Asp Gly Phe Ile Ser Asn Asn Gly Pro Phe Ser Tyr

325 330 335

Tyr	Leu	Gly	Gly	Asn	Pro	Ser	Gln	Pro	Leu	Glu	Ser	Ser	Gly	Phe	Pro
			340					345					350		
Glu	Ala	Val	Gln	Gly	Leu	Pro	Gly	Asn	Gly	Ser	Pro	Glu	Asp	Met	Gln
		355					360					365			
Gly	Ala	Val	Val	Glu	Gly	Lys	Gly	Glu	Val	Lys	Arg	Gly	Gly	Glu	Asp
	370					375					380				
Gly	Gly	Ser	Asn	Ser	Gly	Ala	Pro	His	Arg	Glu	Lys	Arg	Ala	Gly	Glu
385					390					395					400
Ser	Glu	Glu	Phe	Ser	Asn	Ile	Arg	Arg	Gly	Arg	Gly	His	Arg	Met	Gln
				405					410					415	
His	Leu	Ser	Glu	Gly	Ser	Lys	Gly	Arg	Gln	Val	Gly	Ser	Gly	Gly	Asp
			420					425					430		
Gly	Glu	Arg	Trp	Gly	Ser	Asp	Arg	Gly	Ser	Arg	Gly	Ser	Leu	Asn	Glu
		435					440					445			
Gln	Ile	Ala	Leu	Val	Leu	Met	Arg	Leu	Gln	Glu	Asp	Met	Gln	Asn	Val
	450					455					460				
Leu	Gln	Arg	Leu	His	Lys	Leu	Gļu	Met	Leu	Ala	Ala	Ser	Gln	Ala	Lys
465					470					475					480

Ser Ser Ala I	Leu Gln Thr	Ser Asn Gln	Pro Thr Ser Pro	Arg Pro Ser
	485		490	495
Trp Trp Pro I	Phe Glu Met	Ser Pro Gly	Ala Leu Thr Phe	Ala Ile Ile
5	500	505		510
Trp Pro Phe 1	Ile Ala Gln	Trp Leu Val	His Leu Tyr Tyr	Gln Arg Arg
515		520	525	
Arg Arg				
530				
<210> 90				
<211> 86				
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<213> Homo sa	apiens			
<400> 90				
Met Ser Gln A	ala Phe Glu	Lys Ala Ala	Lys Asp Ile Lys	His Leu Glu
1	5		10	15
Thr Lys Pro A	ala Asp Asp	Glu Arg Met	Phe Ile Tyr Ser	Arg Cys Lys
	20	25		30
Gln Ala Thr V	al His Asp	Leu Asn Thr	Glu Trp Pro Arg	Met Leu Asp
35		40	45	

Leu	Lys	Gly	' Lys	. Ala	Lys	Gln	Asp	Ala	Trp	) Asn	Glu	Leu	Lys	Asp	Thr
	50	)				55					60				
		Glu	Asp	Ala	Val	Lys	Ala	Asp	Ile	Asn	Lys	Val	Glu	Glu	Arg
65					70					75					80
_															
Asn	Lys	Lys	Tyr		Ile										
				85											
c21:	0> 9	1													
	1> 8														
	<212> PRT														
<21	3> H	omo	sapi	ens											
-40/															
	0> 9:		37	<b>a</b> 1.		_	_	_ •	_						
	ser	GIII	Ата		Phe	Asp	Lys	Ala		Glu	Glu	Val	Lys		Leu
1				5					10					15	
Lvs	Thr	Twe	Pro	Δla	λen	Cl.,	C1	Mob	T	Dh.a	<b>-</b> 1 -	_	_		_
-,-		Lys	20	AIA	Asp	Giu	GIU		Leu	Pne	11e	Tyr		Hıs	Tyr
			20					25					30		
Lvs	Gln	Ala	Thr	Val	Gly	Asn	Tla	Δen	Thr	Clv	7.~~	Dwo	<b>01</b>	<b>&gt;</b> # - 4-	<b>.</b>
2		35			Cly	nop	40	ASII	1111	GIU	Arg		GIY	мес	Leu
							40					45			
Asp	Phe	Lvs	Glv	Lve	Ala	Lvs	Trp	Asp	Δla	Тт	Δen	Gl u	Lou	T	C111
	50	- <b>4</b> -	,	Lys		55			711 u	111	60	GIU	neu	ràs .	GIY

Thr Ser Lys Glu Asp Ala Met Lys Ala Tyr Ile Asp Lys Val Glu Glu Leu Lys Lys Lys Tyr Gly Ile <210> 92 <211> 104 <212> PRT <213> Homo sapiens <400> 92 Met Trp Gly Asp Leu Trp Leu Leu Pro Pro Ala Ser Ala Asn Pro Gly Thr Gly Thr Glu Ala Glu Phe Glu Lys Ala Ala Glu Glu Val Arg His Leu Lys Thr Lys Pro Ser Asp Glu Glu Met Leu Phe Ile Tyr Gly His Tyr Lys Gln Ala Thr Val Gly Asp Ile Asn Thr Glu Arg Pro Gly Met Leu Asp Phe Thr Gly Lys Ala Lys Trp Asp Ala Trp Asn Glu Leu Lys

Gly Thr Ser Lys Glu Asp Ala Met Lys Ala Tyr Ile Asn Lys Val Glu 85 90 95 Glu Leu Lys Lys Lys Tyr Gly Ile 100 <210> 93 <211> 104 <212> PRT <213> Homo sapiens <400> 93 Met Trp Gly Asp Leu Trp Leu Leu Pro Pro Ala Ser Ala Asn Pro Gly 1 5 10 15 Thr Gly Thr Glu Ala Glu Phe Glu Lys Ala Ala Glu Glu Val Arg His 20 25 30 Leu Lys Thr Lys Pro Ser Asp Glu Glu Met Leu Phe Ile Tyr Gly His 35 40 45

Tyr Lys Gln Ala Thr Val Gly Asp Ile Asn Thr Glu Arg Pro Gly Met
50 55 60

Leu Asp Phe Thr Gly Lys Ala Lys Trp Asp Ala Trp Asn Glu Leu Lys

75
80

Glu Leu Lys Lys Lys Tyr Gly Ile <210> 94 <211> 359 <212> PRT <213> Homo sapiens <400> 94 Met Arg Ala Ser Gln Lys Asp Phe Glu Asn Ser Met Asn Gln Val Lys Leu Leu Lys Lys Asp Pro Gly Asn Glu Val Lys Leu Lys Leu Tyr Ala Leu Tyr Lys Gln Ala Thr Glu Gly Pro Cys Asn Met Pro Lys Pro Gly Val Phe Asp Leu Ile Asn Lys Ala Lys Trp Asp Ala Trp Asn Ala Leu Gly Ser Leu Pro Lys Glu Ala Ala Arg Gln Asn Tyr Val Asp Leu Val 

Gly Thr Ser Lys Glu Asp Ala Met Lys Ala Tyr Ile Asn Lys Val Glu

Se	r Se	er	Let	ı Se:	r Pro	o Sei	c Le	ı Glu	ı Sei	s Sei	r Ser	Glr	ı Val	l Gli	ı Pro	Gly
					8	5				90	)				95	
Thi	r As	g	Arg	l Ly	s Sei	r Thi	Gly	/ Phe	Gli	ı Thı	. Leu	val	. Val	. Thr	Ser	Glu
				100	)				105	5				110	)	
Asp	G1	У	Ile	Thi	Lys	: Ile	Met	Phe	Asn	. Arg	, Pro	Lys	Lys	Lys	as As n	Ala
			115					120					125			
Ile	: As	n	Thr	Glu	ı Met	: Tyr	His	Glu	Ile	Met	Arg	Ala	Leu	Lys	Ala	Ala
	13						135					140		-		
Ser	· Ly	s	Asp	Asp	Ser	· Ile	Ile	Thr	Val	Leu	Thr	Glv	Asn	Glv	Asp	Tvr
145						150					155	_		1	<u>F</u>	160
																100
Tyr	Se	r	Ser	Gly	Asn	Asp	Leu	Thr	Asn	Phe	Thr	Asp	Tle	Pro	Pro	Glv
					165					170		- 4.0 <u>F</u>			175	Gly
															1/3	
Gly	۷a:	L	Glu	Glu	Lvs	Ala	Lvs	Asn	Δsn	Δla	Val	Len	Len	7 ~~	Glu	Dh.a
•				180			-75		185	nia	vai	Бец	Leu		GIU	Pne
									100					190		
Val	Glv	, (	Cvs	Phe	Tle	Agn	Dhe	Pro	T 270	Dwo	т о	T] -	77-	**- 3	Val	_
	<u></u>		195	1110	110	rap	FIIE		гуѕ	PIO	Leu	ite		vaı	Val	Asn
		•						200					205			
Clar	Dwa	. ,	۸۱.	17- 1	<b>01</b>	-1	_									
ату			11d	val	стА	тте		val	Thr	Leu	Leu		Leu	Phe	Asp	Ala
	210	1					215					220				
	_		_													
val	Tyr	P	Ma	Ser	Asp	Arg	Ala	Thr	Phe	His	Thr	Pro	Phe	Ser	His	Leu

Gly Gln Ser Pro Glu Gly Cys Ser Ser Tyr Thr Phe Pro Lys Ile Met

245 250 255

Ser Pro Ala Lys Ala Thr Glu Met Leu Ile Phe Gly Lys Lys Leu Thr
260 265 270

Ala Gly Glu Ala Cys Ala Gln Gly Leu Val Thr Glu Val Phe Pro Asp
275
280
285

Ser Thr Phe Gln Lys Glu Val Trp Thr Arg Leu Lys Ala Phe Ala Lys
290 295 300

Leu Pro Pro Asn Ala Leu Arg Ile Ser Lys Glu Val Ile Arg Lys Arg
305 310 315 320

Glu Arg Glu Lys Leu His Ala Val Asn Ala Glu Glu Cys Asn Val Leu

325 330 335

Gln Gly Arg Trp Leu Ser Asp Glu Cys Thr Asn Ala Val Val Asn Phe
340 345 350

Leu Ser Arg Lys Ser Lys Leu

355

<210> 95

<2]	l1> 3	359													
<21	L2> I	PRT													
<21	L3> I	omo	sapi	iens											
<40	00> 9	5													
Met	. Arg	, Ala	a Ser	Gln	. Lys	Asp	Phe	Glu	Asn	Ser	Met	Asn	Glr	ı Val	. Lys
1				5					10					15	
Leu	. Lev	Lys	. Lys	: Asp	Pro	Gly	Asn	Glu	Val	Lys	Leu	Lys	Leu	ı Tyr	Ala
			20					25				_	30		
Leu	Tyr	Lys	Gln	Ala	Thr	Glu	Gly	Pro	Cys	Asn	Met	Pro	Lys	Pro	Gly
		35					40					45			<b>.</b>
Val	Phe	Asp	Leu	Ile	Asn	Lys	Ala	Lys	Trp	Asp	Ala	Trp	Asn	Ala	Leu
	50					55			_	_	60	-			
Gly	Ser	Leu	Pro	Lys	Glu	Ala	Ala	Arg	Gln	Asn	Tvr	Val	asp	Leu	Val
65					70					75	•		<u>-</u>		80
Ser	Ser	Leu	Ser	Pro	Ser	Leu	Glu	Ser	Ser	Ser	Gln	Val	Glu	Pro	Gly
				85					90					95	O <sub>1</sub>
														,,,	
Thr	Asp	Arg	Lys	Ser	Thr	Glv	Phe	Glu	Thr	ī.eu	Val	Val	Thr	Sar	Gl <sub>11</sub>
	_	-	100			2		105		Lou	vui	vai		261	Giu
								-00					110		
Asp	Glv	Ile	Thr	Lys	Tle	Me+	Dhe	Aen.	7 r~	Dro	T	T	T	7	7.1
<b>F</b>	1	115		<b>-</b> 13	**C			VOII	ALG	LTO.	ьys		ьys	ASN	Ala
		ربب					120					125			

Ile	e Ası	n Th	r Gl	u Met	Ty	r His	s Glu	ı Ile	e Met	Arg	g Ala	Leu	Lys	Ala	Ala
	130	)				135	5				140	)			
Ser	c Lys	s As	p Ası	) Ser	: Ile	≥ Ile	Thr	· Val	. Lev	Thr	Gly	Asn	Gly	Asp	Tyr
145	5				150	)				155	i				160
Tyr	Ser	Se	r Gly	/ Asn	Asp	Lev	1 Thr	Asn	Phe	Thr	Asp	Ile	Pro	Pro	Gly
				165	;				170	•				175	
Gly	Val	Glı	ı Glu	Lys	Ala	Lys	Asn	Asn	Ala	Val	Leu	Leu	Arg	Glu	Phe
			180	)				185					190		
Val	Gly	Cys	Phe	Ile	Asp	Phe	Pro	Lys	Pro	Leu	Ile	Ala	Val	Val	Asn
		195	;				200					205			
Gly	Pro	Ala	Val	Gly	Ile	Ser	Val	Thr	Leu	Leu	Gly	Leu	Phe	Asp	Ala
	210					215					220			-	
Val	Tyr	Ala	Ser	Asp	Arq	Ala	Thr	Phe	His	Thr	Pro	Phe	Ser	Иie	Len
225				_	230					235		1110	JCI	1113	
										233					240
Glv	Gln	Ser	Pro	G) 11	Gl v	Circ	Com	Com	<b></b>	m³	-1	_	_		
	<b></b>	501	Pro		GIY	Cys	Sei	ser		Thr	Pne	Pro			Met
				245					250					255	
	_	_ •		_											
Ser	Pro	Ala	Lys	Ala	Thr	Glu	Met	Leu	Ile	Phe	Gly	Lys	Lys	Leu	Thr
			260					265					270		

Ala Gly Glu Ala Cys Ala Gln Gly Leu Val Thr Glu Val Phe Pro Asp Ser Thr Phe Gln Lys Glu Val Trp Thr Arg Leu Lys Ala Phe Ala Lys Leu Pro Pro Asn Ala Leu Arg Ile Ser Lys Glu Val Ile Arg Lys Arg Glu Arg Glu Lys Leu His Ala Val Asn Ala Glu Glu Cys Asn Val Leu Gln Gly Arg Trp Leu Ser Asp Glu Cys Thr Asn Ala Val Val Asn Phe Leu Ser Arg Lys Ser Lys Leu <210> 96 <211> 282 <212> PRT <213> Homo sapiens <400> 96 Met Ala Ser Ser Phe Leu Pro Ala Gly Ala Ile Thr Gly Asp Ser Gly 

Gl	y Gl	ı Le	u Se	r Se:	r Gl	y As	p Ası	Ser	Gly	/ Glu	ı Val	. Glu	Phe	Pro	His
			20	כ				25	5				30		
Sei	Pro	Gl	u Ile	e Glu	ı Glı	ı Thi	r Ser	Cys	Leu	Ala	Glu	Leu	Phe	Glu	Lys
		3.	5				40	)				45			
Ala			a His	: Lei	ı Glr	ı Gly	/ Leu	ı Ile	Gln	Val	Ala	Ser	Arg	Glu	Gln
	50	)				55	5				60				
		Туз	: Leu	Туг			, Tyr	Lys	Gln	Val	Lys	Val	Gly	Asn	Cys
65					70	)				75					80
_															
Asn	Thr	Pro	Lys			Phe	Phe	Asp	Phe	Glu	Gly	Lys	Gln	Lys	Trp
				85					90					95	
C1	7.7.a	<b></b>	<b>.</b>	- 1	_		_								
Giu	Ala	Trp		Ala	Leu	Gly	Asp		Ser	Pro	Ser	Gln	Ala	Met	Gln
			100					105					110		
Glu	There	τ1.	71.	17_1	**- 7	•	_	_	_		_				
Giu	TYL		Ala	val	vai	ьys	Lys	Leu	Asp	Pro	Gly		Asn	Pro	Gln
		115					120					125			
Tle	Pro	Glu	Larg	Tua	<b>G1</b>	T	<b>a</b> 1		_	_,			_		
116	130	GIU	пур	гуѕ	GIY		Glu	Ala	Asn	Thr		Phe	Gly	Gly	Pro
	130					135					140				
Val	Tla	Sar	50×	T 0	<b>T</b>	TT	<b>~</b> 1	~1							
145	116	561	361	ьеu		нıs	Glu	GIU			Arg	Glu	Glu	Asp	Lys
-TJ					150					155					160
Asn	Ile	Phe	Asp	Tyr	Cvs	Ara	Glu	Asn	Δen	Tla	Δαν	ui c	Tla ·	The T	· • • •
			E		-1-	5	J_ u		- 1011		Ash	11T2	тте	III	ьys

Ala Ile Lys Ser Lys Asn Val Asp Val Asn Val Lys Asp Glu Glu Gly

180 185 190

Arg Ala Leu Leu His Trp Ala Cys Asp Arg Gly His Lys Glu Leu Val

Thr Val Leu Leu Gln His Arg Ala Asp Ile Asn Cys Gln Asp Asn Glu 210 215 220

Gly Gln Thr Ala Leu His Tyr Ala Ser Ala Cys Glu Phe Leu Asp Ile 225 230 235 240

Val Glu Leu Leu Gln Ser Gly Ala Asp Pro Thr Leu Arg Asp Gln
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Asp Gly Cys Leu Pro Glu Glu Val Thr Gly Cys Lys Thr Val Ser Leu
260 265 270

Val Leu Gln Arg His Thr Thr Gly Lys Ala
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Glu	Ala	Trp	Lys	Ala	Leu	Gly	Asp	Ser	Ser	Pro	Ser	Gln	Ala	Met	Gln
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Glu	Tyr		Ala	Val	Val	Lys		Leu	Asp	Pro	Gly		Asn	Pro	Gln
		115					120					125			
Ile	Pro	Glu	Lys	Lys	Arg	Lys	Arg	Ser	Lys	Tyr	Lys	Val	Trp	Ala	Ser
	130					135					140				
Tyr	Phe	Ser	Ile	Ser	Arg	Asn	His	Gln	Gly	Arg	Asp	Lys	Asn	Ile	Phe
145					150					155					160
Asp	Tyr	Cys	Arg	Glu	Asn	Asn	Ile	Asp	His	Ile	Thr	Lys	Ala	Ile	Lys
				165					170					175	
Ser	Lys	Asn	Val	Asp	Val	Asn	Val	Lys	Asp	Glu	Glu	Gly	Arg	Ala	Leu
			180					185					190		
Leu	His	Trp	Ala	Cys	Asp	Arg	Gly	His	Lys	Glu	Leu	Val	Thr	Val	Leu
		195					200					205			
Leu	Gln	His	Arg	Ala	Asp	Ile	Asn	Cys	Gln	Asp	Asn	Glu	Gly	Gln	Thr
	210					215					220				
Ala	Leu	His	Tyr	Ala	Ser	Ala	Cys	Glu	Phe	Leu	Asp	Ile	Val	Glu	Leu
225					230					235					240

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Leu Pro Glu Glu Val Thr Gly Cys Lys Thr Val Ser Leu Val Leu Gln
260 265 270

Arg His Thr Thr Gly Lys Ala

275

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<213> Homo sapiens

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Leu Lys Gln Leu Lys Gly Pro Val Ser Asp Gln Glu Lys Leu Leu Val

Tyr Gly Leu Tyr Lys Gln Ala Thr Gln Gly Asp Cys Asp Ile Pro Gly

35 40 45

Pro Pro Ala Ser Asp Val Arg Ala Arg Ala Lys Trp Glu Ala Trp Ser
50 55 60

Ala Asn Lys Gly Ala Ser Lys Met Asp Ala Met Arg Gly Tyr Ala Ala

70

75

80

Lys Val Glu Glu Leu Thr Lys Lys Glu

85

<210> 99

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<212> PRT

<213> Homo sapiens

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Thr Gly Thr Glu Ala Glu Phe Glu Lys Ala Ala Glu Glu Val Arg His

20 25 30

Leu Lys Thr Lys Pro Ser Asp Glu Glu Met Leu Phe Ile Tyr Gly His

35 40 45

Tyr Lys Gln Ala Thr Val Gly Asp Ile Asn Thr Glu Arg Pro Gly Met

50 55 60

Leu Asp Phe Thr Gly Lys Ala Lys Trp Asp Ala Trp Asn Glu Leu Lys

65 70 75 80

Gly Thr Ser Lys Glu Asp Ala Met Lys Ala Tyr Ile Asn Lys Val Glu

Glu Leu Lys Lys Lys Tyr Gly Ile

<210> 100

<211> 86

<212> PRT

<213> Homo sapiens

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Met Ser Gln Ala Phe Glu Lys Ala Ala Lys Asp Ile Lys His Leu Glu

Thr Lys Pro Ala Asp Asp Glu Arg Met Phe Ile Tyr Ser Arg Cys Lys

Gln Ala Thr Val His Asp Leu Asn Thr Glu Trp Pro Arg Met Leu Asp

Leu Lys Gly Lys Ala Lys Gln Asp Ala Trp Asn Glu Leu Lys Asp Thr

Ala Lys Glu Asp Ala Val Lys Ala Asp Ile Asn Lys Val Glu Glu Arg

Asn Lys Lys Tyr Arg Ile

<210> 101

<211> 138

<212> PRT

<213> Homo sapiens

<400> 101

Met Ala Lys Pro Ile Ser Thr Lys Asn Thr Lys Ile Ser Arg His Gly

1 5 10 15

Trp His Ala Ala Val Ile Thr Ala Ala Arg Glu Ala Glu Ala Glu Asn

20 25 30

His Leu Ser Trp Glu Glu Lys Lys Lys Lys Lys Arg Cys Ala Gly Ile

35 40 45

Lys His Phe Lys Thr Lys Pro Ala Asp Asp Glu Met Arg Phe Leu Tyr

50 55 60

85

Gly His Tyr Lys Arg Ala Thr Val Gly Asn Ile Lys Thr Glu Arg Pro

65 70 75 80

Gly Met Val Asp Phe Lys Gly Lys Ala Lys Trp Asp Pro Trp Asn Leu

90 95

Val Lys Gly Ala Ala Arg Glu Asp Pro Met Lys Ala Lys Ala Tyr Val

105

110

Lys Lys Val Glu Glu Leu Lys Lys Phe Arg Ile Arg Glu Thr Gly
115 120 125

Ile Val Ala Ser His Ala Phe Val Leu Asn
...
130 135

<210> 102

<211> 96

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<213> Homo sapiens

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Met Leu Leu Leu Phe Val Cys Leu Phe Phe Leu Lys Ala Asp Phe Asp

1 5 10 15

Arg Ala Ala Glu Asp Val Arg Lys Leu Lys Ala Arg Pro Asp Asp Gly
20 25 30

Glu Leu Lys Glu Leu Tyr Gly Leu Tyr Lys Gln Ala Ile Val Gly Asp

35 40 45

Ile Asn Ile Ala Cys Pro Gly Met Leu Asp Leu Lys Gly Lys Ala Lys
50 55 60

Trp Glu Ala Trp Asn Leu Lys Lys Gly Leu Ser Thr Glu Asp Ala Thr

Ser Ala Tyr Ile Ser Lys Ala Lys Glu Leu Ile Glu Lys Tyr Gly Ile 85 90 95

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Met Ser Leu Gln Ala Asp Phe Asp Met Val Thr Glu Asp Val Arg Lys

1 5 10 15

Leu Lys Thr Arg Pro Asp Asp Glu Glu Leu Lys Glu Leu Tyr Gly Leu
20 25 30

Tyr Lys Gln Ala Val Ile Gly Asn Ile Asn Ile Glu Cys Ser Glu Met

35 40 45

Leu Glu Leu Lys Gly Lys Ala Lys Trp Glu Ala Gln Asn Pro Gln Lys
50 55 60

Gly Leu Ser Glu Glu Asp Met Met Arg Ala Phe Ile Ser Lys Ala Glu

Glu Leu Ile Glu Lys Tyr Gly Ile

<210> 104

<211> 86

<212> PRT

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<400> 104

Met Ala Leu Gln Ala Glu Phe Asp Lys Ala Ala Glu Asp Val Arg Lys

Leu Pro Thr Arg Pro Ala Asp Asn Lys Glu Leu Lys Lys Leu Asp Gly

Leu Tyr Lys Gln Ala Ile Ile Gly Asp Ile Asn Ile Glu Tyr Leu Gly

Met Leu Asp Phe Lys Gly Lys Ala Lys Cys Ala Ala Trp Thr Leu Gln

Lys Arg Leu Ser Lys Glu Asp Ala Thr Ser Val Ser Ile Ser Lys Ala

Lys Glu Pro Ile Glu Lys

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Glu Ala Trp Lys Ala Leu Gly Asp Ser Ser Pro Ser Gln Ala Met Gln

Glu	Tyr	Ile	Ala	Val	Val	Lys	Lys 120	Leu	Asp	Pro	Gly	Trp 125	Asn	Pro	Gln
Ile	Pro	Glu	Lys	Lys	Gly	Lys 135	Glu	Ala	Asn	Thr	Gly 140	Phe	Gly	Gly	Pro
Val	Ile	Ser	Ser	Leu	Tyr 150	His	Glu	Glu	Thr	Ile 155	Arg	Glu	Glu	Asp	Lys 160
Asn	Ile	Phe	Asp	Туг 165	Cys	Arg	Glu	Asn	Asn 170	Ile	Asp	His	Ile	Thr 175	Lys
Ala	Ile	Lys	Ser 180	Lys	Asn	Val	Asp	Val 185	Asn	Val	Lys	Asp	Glu 190	Glu	Gly
Arg	Ala	Leu 195	Leu	His	Trp	Ala	Cys 200	Asp	Arg	Gly	His	Lys 205	Glu	Leu	Val
Thr	Val 210	Leu	Leu	Gln	His	Arg 215	Ala	Asp	Ile	Asn	Cys 220	Gln	Asp	Asn	Glu

Gly Gln Thr Ala Leu His Tyr Ala Ser Ala Cys Glu Phe Leu Asp Ile
225 230 235 240

Val Glu Leu Leu Gln Ser Gly Ala Asp Pro Thr Leu Arg Asp Gln
245 250 255

Asp Gly Cys Leu Pro Glu Glu Val Thr Gly Cys Lys Thr Val	Ser Leu
260 265 270	)
Val Leu Gln Arg His Thr Thr Gly Lys Ala	
275 280	
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<213> Homo sapiens	
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Leu Leu Lys Lys Asp Pro Gly Asn Glu Val Lys Leu Lys Leu	Tyr Ala
20 25 30	
Leu Tyr Lys Gln Ala Thr Glu Gly Pro Cys Asn Met Pro Lys	Pro Gly
35 40 45	
Val Phe Asp Leu Ile Asn Lys Ala Lys Trp Asp Ala Trp Asn	Ala Leu
50 55 60	
Gly Ser Leu Pro Lys Glu Ala Ala Arg Gln Asn Tyr Val Asp	Leu Val
65 70 75	80

Ser	Ser	: Lev	ı Ser	Pro	Ser	Leu	ı Glu	Ser	Ser	Ser	Gln	Val	Glu	Pro	Gly
				85	5				90	)				95	
Thr	Asp	Arg	, Lys	Ser	Thr	Gly	, Phe	Glu	Thr	Leu	Val	Val	Thr	Ser	Glu
			100	)				105					110		
Asp	Gly	Ile	Thr	Lys	Ile	Met	Phe	Asn	Arg	Pro	Lys	Lys	Lys	Asn	Ala
		115					120					125			
Ile	Asn	Thr	Glu	Met	Tyr	His	Glu	Ile	Met	Arg	Ala	Leu	Lys	Ala	Ala
	130					135					140				
Ser	Lys	Asp	Asp	Ser	Ile	Ile	Thr	Val	Leu	Thr	Gly	Asn	Gly	Asp	Tyr
145					150					155					160
Tyr	Ser	Ser	Gly	Asn	Asp	Leu	Thr	Asn	Phe	Thr	Asp	Ile	Pro	Pro	Gly
				165					170					175	
Gly	Val	Glu	Glu	Lys	Ala	Lys	Asn	Asn	Ala	Val	Leu	Leu	Arg	Glu	Phe
			180					185					190		
Val	Gly	Cys	Phe	Ile	Asp	Phe	Pro	Lys	Pro	Leu	Ile	Ala	Val	Val	Asn
		195					200					205			
Gly	Pro	Ala	Val	Gly	Ile	Ser	Val	Thr	Leu	Leu	Gly	Leu	Phe	Asp .	Ala
	210					215					220				

Val	Tyr	Ala	Ser	Asp	Arg	Ala	Thr	Phe	His	Thr	Pro	Phe	Ser	His	Leu
225					230					235					240
Gly	Gln	Ser	Pro	Glu	Gly	Cys	Ser	Ser	Tyr	Thr	Phe	Pro	Lys	Ile	Met
				245					250					255	
Ser	Pro	Ala	Lys	Ala	Thr	Glu	Met	Leu	Ile	Phe	Gly	Lys	Lys	Leu	Thr
			260					265					270		
Ala	Gly	Glu	Ala	Cys	Ala	Gln	Gly	Leu	Val	Thr	Glu	Val	Phe	Pro	Asp
		275					280					285			
Ser	Thr	Phe	Gln	Lys	Glu	Val	Trp	Thr	Arg	Leu	Lys	Ala	Phe	Ala	Lys
	290					295					300				
Leu	Pro	Pro	Asn	Ala	Leu	Arg	Ile	Ser	Lys	Glu	Val	Ile	Arg	Lys	Arg
305					310					315					320
Glu	Arg	Glu	Lys	Leu	His	Ala	Val	Asn	Ala	Glu	Glu	Cys	Asn	Val	Leu
				325					330					335	
Gln (	Gly .	Arg	Trp	Leu	Ser	Asp	Glu	Cys	Thr	Asn	Ala	Val	Val	Asn	Phe
			340					345					350		
Leu S	Ser 1	Arg	Lys	Ser	Lys	Leu									

Page 125

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Leu	Ile	Pro	Ala	Asp	Arg	Pro	Trp	Asp	Arg	Gly	Gln	His	Trp	Gln	Leu
			20					25					30		
Glu	Met	Ala	Asp	Thr	Arg	Ser	Val	His	Glu	Thr	Arg	Phe	Glu	Ala	Ala
		35					40					45			
Val	Lys	Val	Ile	Gln	Ser	Leu	Pro	Lys	Asn	Gly	Ser	Phe	Gln	Pro	Thr
	50					55					60				
Asn	Glu	Met	Met	Leu	Lys	Phe	Tyr	Ser	Phe	Tyr	Lys	Gln	Ala	Thr	Glu
65					70					75					80
Gly	Pro	Cys	Lys	Leu	Ser	Arg	Pro	Gly	Phe	Trp	Asp	Pro	Ile	Gly	Arg
				85					90					95	
Tyr	Lys	Trp	Asp	Ala	Trp	Ser	Ser	Leu	Gly	Asp	Met	Thr	Lys	Glu	Glu
			100					105					110		

Ala Met Ile Ala Tyr Val Glu Glu Met Lys Lys Ile Ile Glu Thr Met

Pro	Met	Thr	Glu	Lys	Val	Glu	Glu	Leu	Leu	Arg	Val	Ile	Gly	Pro	Phe
	130					135					140				
T1 220	Cl.	<b>7</b> 1.0	17-1	<b>a</b> 1	3	<b>T</b>	•		<b>~</b> 3	_					
Tyr	GIU	TTE	vaı	GIU	Asp	Lys	Lys	Ser	Gly	Arg	Ser	Ser	Asp	Ile	Thr

160

Ser Val Arg Leu Glu Lys Ile Ser Lys Cys Leu Glu Asp Leu Gly Asn 165 170 175

150

145

Val Leu Thr Ser Thr Pro Asn Ala Lys Thr Val Asn Gly Lys Ala Glu
180 185 190

Ser Ser Asp Ser Gly Ala Glu Ser Glu Glu Glu Glu Ala Gln Glu Glu
195 200 205

Val Lys Gly Ala Glu His Ser Asp Asn Asp Lys Lys Met Met Lys Lys
210 215 220

Ser Ala Asp His Lys Asn Leu Glu Val Ile Val Thr Asn Gly Tyr Asp 225 230 235 240

Lys Asp Gly Phe Val Gln Asp Ile Gln Asn Asp Ile His Ala Ser Ser

245
250
255

Ser Leu Asn Gly Arg Ser Thr Glu Glu Val Lys Pro Ile Asp Glu Asn 260 265 270

	Gly	Gln	Thr	Gly	Lys	Ser	Ala	Val	Cys	Ile	His	Gln	Gly	Ile	Asn
		275					280					285			
) an	λan	TT d on	Wal.	<b>01</b>	<b>3</b>	17-3	mh	<b>01</b>	<b>-1</b> .	<b>0</b> 1			_,		_
Asp	Asp	HIS	vai	GIU	Asp		Thr	GLY	Ile	GIn		Leu	Thr	Ser	Asp
	290					295					300				
Ser	Asp	Ser	Glu	Val	Tyr	Cys	Asp	Ser	Met	Glu	Gln	Phe	Gly	Gln	Glu
305					310	-	_			315			-		320
Glu	Ser	Leu	Asp	Ser	Phe	Thr	Ser	Asn	Asn	Gly	Pro	Phe	Gln	Tyr	Tyr
				325					330					335	
Leu	Gly	Gly	His	Ser	Ser	Gln	Pro	Met	Glu	Asn	Ser	Gly	Phe	Arg	Glu
			340					345					350		
Asp	Ile	Gln	Val	Pro	Pro	Gly	Asn	Gly	Asn	Ile	Gly	Asn		Gln	Val
Asp	Ile	Gln 355	Val	Pro	Pro	Gly	Asn 360	Gly	Asn	Ile	Gly	Asn 365		Gln	Val
Asp	Ile		Val	Pro	Pro	Gly		Gly	Asn	Ile	Gly			Gln	Val
	Ile Ala	355					360					365	Met		
		355					360					365	Met		
	Ala	355				Gly	360				Gly	365	Met		
Val	Ala	355 Val	Glu	Gly	Lys	Gly 375	360 Glu	Val	Lys	His	Gly 380	365 Gly	Met Glu	Asp	Gly
Val	Ala 370	355 Val	Glu	Gly	Lys	Gly 375	360 Glu	Val	Lys	His	Gly 380	365 Gly	Met Glu	Asp	Gly
Val Arg	Ala 370	355 Val	Glu	Gly	Lys Ala	Gly 375	360 Glu	Val	Lys	His Lys	Gly 380	365 Gly	Met Glu	Asp	Gly Thr
Val Arg 385	Ala 370	355 Val Asn	Glu Ser	Gly	Lys Ala 390	Gly 375 Pro	360 Glu His	Val Arg	Lys Glu	His Lys 395	Gly 380 Arg	365 Gly	Met Glu Gly	Asp	Gly Thr 400

Leu Ser Glu	Gly Thr	Lys Gly	Arg	Gln	Val	Gly	Ser	Gly	Gly	Asp	Gly
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Glu Arg Tr	Gly Ser	Asp Arg	Gly	Ser	Arq	Gly	Ser	Leu	Asn	Glu	Gln
435			440		J	•		445			
			110					777			
	_										
Ile Ala Leu	. Val Leu	Met Arg	Leu	Gln	Glu	Asp	Met	Gln	Asn	Val	Leu
450		455					460				
Gln Arg Lev	Gln Lys	Leu Glu	Thr	Leu	Thr	Ala	Ala	Lys	Ser	Ser	Thr
465		470				475					480
Ser Thr Lev	Gln Thr	Ala Pro	Gln	Pro	Thr	Ser	Ser	Gln	Ara	Pro	Ser
	485				490			<b></b>	5		001
	403				490					495	
Trp Trp Pro	Phe Glu	Met Ser	Pro	Gly	Val	Leu	Thr	Phe	Ala	Ile	Ile
	500			505					510	ē	
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Phe Thr Gly Lys	ı									
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Phe Lys Gly Lys										
20										
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5

10

15

Leu Lys Gly Lys

20

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Gln Ala Thr Val His Asp Leu Asn Thr Glu Trp Pro Arg Met Leu Asp

1

5

10

15

Leu Lys Gly Lys

20

<210> 114

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<213> Homo sapiens

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1

5

10

15

Phe Glu Gly Lys

20

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1

5

10

15

Leu Ile Asn Lys

20

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1

5

10

15

Pro Ile Gly Arg

20

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Phe Thr

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Leu Lys					
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1	5		10		15
Phe Lys					
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Arg Pro Gly Met Leu Asp Phe Lys Gly Lys Ala Lys Trp Asp Ala Trp

25

30

<210> 125

<211> 32

<212> PRT

<213> Artificial Sequence

<220>

<400> 125

Ile Tyr Ser His Tyr Lys Gln Ala Thr Val Gly Asp Ile Asn Thr Glu

1 5 10 15

Arg Pro Gly Met Leu Asp Phe Lys Gly Lys Ala Lys Trp Asp Ala Trp

20 25 30

<210> 126

<211> 32

<212> PRT <213> Homo sapiens <400> 126 Ile Tyr Gly His Tyr Lys Gln Ala Thr Val Gly Asp Ile Asn Thr Glu 1 5 10 15 Arg Pro Gly Met Leu Asp Phe Thr Gly Lys Ala Lys Trp Asp Ala Trp 20 25 30 <210> 127 <211> 32 <212> PRT <213> turtle <400> 127 Ile Tyr Ser His Phe Lys Gln Ala Thr Val Gly Asp Ile Asn Thr Glu 1 5 10 15 Arg Pro Gly Phe Leu Asp Phe Lys Gly Lys Ala Lys Trp Asp Ala Trp 20 25 30

<210> 128 <211> 32 <212> PRT <213> mallard <400> 128 Val Tyr Ser His Tyr Lys Gln Ala Thr Val Gly Asp Val Asn Thr Asp 5 10 15 Arg Pro Gly Met Leu Asp Phe Lys Gly Lys Ala Lys Trp Asp Ala Trp 20 25 30 <210> 129 <211> 32 <212> PRT <213> Mus musculus <400> 129 Ile Tyr Ser His Phe Lys Gln Ala Thr Val Gly Asp Val Asn Thr Asp 1 5 10 15

Arg Pro Gly Leu Leu Asp Leu Lys Gly Lys Ala Lys Trp Asp Ser Trp

25

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<210> 130

<211> 32

<212> PRT

<213> Sus scrofa

<400> 130

Ile Tyr Ser His Tyr Lys Gln Ala Thr Val Gly Asp Ile Asn Thr Glu

1

5

10

15

Arg Pro Gly Ile Leu Asp Leu Lys Gly Lys Ala Lys Trp Asp Ala Trp

20

25

30

<210> 131

<211> 32

<212> PRT

<213> Bos taurus

<400> 131

Ile Tyr Ser His Tyr Lys Gln Ala Thr Val Gly Asp Ile Asn Thr Glu
1 5 10 15
Arg Pro Gly Met Leu Asp Phe Lys Gly Lys Ala Lys Trp Asp Ala Trp
20 25 30
<210> 132
<211> 32
<212> PRT
<213> Homo sapiens
<400> 132
Ile Tyr Gly His Tyr Lys Gln Ala Thr Val Gly Asp Ile Asn Thr Glu
1 5 10 15
Arg Pro Gly Met Leu Asp Phe Thr Gly Lys Ala Lys Trp Asp Ala Trp
20 25 30

<210> 133

<211> 32

<212> PRT <213> Artificial Sequence <220> <223> Description of Artificial Sequence: synthetic construct; chemically synthesized <400> 133 Ile Tyr Ser His Tyr Lys Gln Ala Thr Val Gly Asp Ile Asn Thr Glu 5 10 15 Arg Pro Gly Met Leu Asp Phe Lys Gly Lys Ala Lys Trp Asp Ala Trp 20 25 30 <210> 134 <211> 32 <212> PRT <213> Homo sapiens <400> 134 Ile Tyr Gly His Tyr Lys Gln Ala Thr Val Gly Asp Ile Asn Thr Glu 1 10 15

Arg Pro Gly Met Leu Asp Phe Thr Gly Lys Ala Lys Trp Asp Ala Trp

25

30

<210> 135

<211> 32

<212> PRT

<213> Anas platyrhynchos

<400> 135

Leu Tyr Gly Phe Tyr Lys Gln Ala Thr Val Gly Asp Ile Asn Ile Glu

1

5

10

15

Cys Pro Gly Met Leu Asp Leu Lys Gly Lys Ala Lys Trp Glu Ala Trp

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<210> 136

<211> 32

<212> PRT

<213> turtle

<400> 136

Ile Tyr Ser His Phe Lys Gln Ala Thr Val Gly Asp Ile Asn Thr Glu 1 5 10 15 Arg Pro Gly Phe Leu Asp Phe Lys Gly Lys Ala Lys Trp Asp Ala Trp 20 25 30 <210> 137 <211> 20 <212> PRT <213> Homo sapiens <400> 137 Gln Ser Thr Val Gly Asp Ile Asn Ile Glu Cys Pro Gly Met Leu Asp 1 10 15 Leu Lys Gly Lys 20 <210> 138 <211> 20 <212> PRT <213> Homo sapiens

<400> 138 Gln Ala Ser Val Gly Asp Asn Asp Thr Ala Lys Pro Gly Leu Leu Asp 1 5 10 15 Leu Lys Gly Lys 20 <210> 139 <211> 20 <212> PRT <213> Homo sapiens <400> 139 Gln Ala Ser Val Gly Asp Asn Asp Thr Ala Lys Pro Gly Leu Leu Asp 10 15 Leu Lys Gly Lys 20 <210> 140 <211> 20 <212> PRT <213> Homo sapiens

Page 146

Gln Ala Thr Val Gly Asp Asn Asn Thr Glu Lys Pro Gly Leu Leu Asp

<400> 140

1

5

10

15

Leu Lys Gly Lys

20

<210> 141

<211> 20

<212> PRT

<213> Bos taurus

<400> 141

Gln Ala Thr Val Gly Asp Ile Asn Thr Glu Arg Pro Gly Met Leu Asp

1

5

10

15

Phe Lys Gly Lys

20

<210> 142

<211> 20

<212> PRT

<213> Mus musculus

<400> 142

Gln Ala Thr Val Gly Asp Val Asn Thr Asp Arg Pro Gly Leu Leu Asp

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15

Leu Lys Gly Lys

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<210> 143

<211> 20

<212> PRT

<213> Rattus norvegicus

<400> 143

Gln Ala Thr Val Gly Asp Val Asn Thr Asp Arg Pro Gly Leu Leu Asp

1 5 10 15

Leu Lys Gly Lys

20

<210> 144

<211> 20

<212> PRT

<213> Sus scrofa

<400> 144

Gln Ala Thr Val Gly Asp Ile Asn Thr Glu Arg Pro Gly Ile Leu Asp

1 5 10 15

Leu Lys Gly Lys

20

<210> 145 <211> 20 <212> PRT <213> Bos taurus <400> 145 Gln Ala Thr Glu Gly Pro Cys Lys Leu Ser Lys Pro Gly Phe Trp Asp 10 15 Pro Val Gly Arg 20 <210> 146 <211> 20 <212> PRT <213> Cyprinus carpio <400> 146 Gln Ala Thr Gln Gly Pro Cys Asn Thr Pro Lys Pro Ser Met Leu Asp 1 10 15

Phe Val Asn Lys

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<210> 147 <211> 20 <212> PRT <213> Mus musculus <400> 147 Gln Ala Thr Glu Gly Thr Cys Asn Met Pro Lys Pro Gly Met Leu Asp 1 5 10 15 Phe Val Asn Lys 20 <210> 148 <211> 20 <212> PRT <213> Homo sapiens <220> <221> VARIANT <222> (2) <223> wherein Xaa is any amino acid <220> <221> VARIANT <222> (3) <223> wherein Xaa is any amino acid

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<222> (6)
<223> wherein Xaa is any amino acid
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<223> wherein Xaa is any amino acid
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<221> VARIANT
<222> (10)
<223> wherein Xaa is any amino acid
<220>
<221> VARIANT
<222> (11)
<223> wherein Xaa is Arg or Lys
<220>
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<222> (13)
<223> wherein Xaa is any amino acid
<220>
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<222> (14)
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223> wherein Xaa is any amino acid
220>
221> VARIANT
222> (15)
223> wherein Xaa is any amino acid
220>
221> VARIANT
222> (18)
223> wherein Xaa is any amino acid
400> 148
ln Xaa Xaa Val Gly Xaa Xaa Asn Thr Xaa Xaa Pro Xaa Xaa Xaa Asp
1 5 10 15
1 5 10 15
1 5 10 15 he Xaa Gly Lys
he Xaa Gly Lys
he Xaa Gly Lys
he Xaa Gly Lys
he Xaa Gly Lys 20
he Xaa Gly Lys 20 210> 149
he Xaa Gly Lys 20  210> 149 211> 89
he Xaa Gly Lys 20  210> 149 211> 89 212> PRT
he Xaa Gly Lys 20  210> 149 211> 89 212> PRT
he Xaa Gly Lys 20  210> 149  211> 89  212> PRT  213> Homo sapiens

20 25 30	
Tyr Gly Leu Tyr Lys Gln Ala Thr Gln Gly Asp Cys Asp Ile F	Pro Gly
35 40 45	
Pro Pro Ala Ser Asp Val Arg Ala Arg Ala Lys Trp Glu Ala T	Trp Ser
50 55 60	
Ala Asn Lys Gly Ala Ser Lys Met Asp Ala Met Arg Gly Tyr A	Ala Ala
65 70 75	80
Lys Val Glu Glu Leu Thr Lys Lys Glu	
85	
<210> 150	
<211> 228	
<212> PRT	
<213> Homo sapiens	
<400> 150	
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Leu Arg Pro Ala Pro Pro Thr Ala Ser Ala Ala His Ala Gln S	Ser Ser

Arg	Thr	Ser	Ala	Pro	Ser	Ala	Gln	Arg	Arg	Leu	Pro	Ala	Glu	Pro	Ser
		35					40					45			
His	Gln	Pro	Ser	Ala	Pro	Gly	Thr	Ala	Ser	Thr	Thr	Pro	Cvs	Ala	Lvs
						_							-1-		-1-
	50					55					60				
Trp	Ser	Ser	Ser	Cys	Ala	Ala	Leu	Lys	Gln	Leu	Lys	Gly	Pro	Val	Ser
65					70					75					80
Asp	Gln	Glu	Lys	Leu	Leu	Val	Tyr	Gly	Leu	Tyr	Lys	Gln	Ala	Thr	Gln
_			_	85			-	-	90	-	•			95	
				05					50					75	
Gly	Asp	Cys	Asp	Ile	Pro	Gly	Pro	Pro	Ala	Ser	Asp	Val	Arg	Ala	Arg
			100					105					110		
Ala	Lys	Trp	Glu	Ala	Trp	Ser	Ala	Asn	Lys	Gly	Ala	Ser	Lys	Met	Asp
		115					120					125			
_ •					_	_			_	_					
Ala	Met	Arg	Gly	Tyr	Ala	Ala	Lys	Val	Glu	Glu	Leu	Thr	Lys	Lys	Glu
	130					135					140				
Val	Gly	Gly	Val	Glu	Arg	Glu	Gln	Arg	Gly	Val	Gln	Asp	Gly	Arg	His
145					150					155					160
~1	~ 3	_		-7		_		>	- 7	_					_ •
GLu	GLY	Leu	Arg	GIY	GIn	Ser	GLY	GLY	Ala	Asp	Glu	Glu	Gly	Arg	Ala
				165					170					175	

Ser Lys Met Asp Ala Met Arg Gly Tyr Ala Ala Lys Val Glu Glu Leu Thr Lys Lys Glu Val Gly Gly Val Glu Arg Glu Gln Arg Gly Val Gln Asp Gly Arg His Glu Gly Leu Arg Gly Gln Ser Glu Glu Met Arg Lys Lys Glu Ala Gly <210> 151 <211> 191 <212> PRT <213> Homo sapiens <400> 151 Met Gly Asp Ala Gly Ala Thr Ala Ala Ala Leu Arg Pro Ala His Asn Leu Arg Pro Ala Pro Pro Thr Ala Ser Ala Ala His Ala Ser Pro His Glu Arg Ala Arg Gln Ala Ser Arg Ala Phe Arg Gln Ser Pro Pro Thr 

Ser	Pro	Gln	Leu	Leu	Ala	Pro	Gly	Thr	Ala	Ser	Thr	Thr	Pro	Cys	Ala
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Lys	Trp	Ser	Ser	Ser	Cys	Ala	Ala	Leu	Lys	Gln	Leu	Lys	Gly	Pro	Val
65					70					75					80
Ser	Asp	Gln	Glu	Lys	Leu	Leu	Val	Tyr	Gly	Leu	Tyr	Lys	Gln	Ala	Thr
				85				_	90		-	-		95	
														-	
Gln	Clv	Λαn	Cvc	Acn	Tlo	Dro	C111	Dro	Dro	ת א	C0~	7 an	Val	7~~	77.
GIII	GIY	Asp		Asp	116	PIO	GIY		PIO	АІА	ser	Asp		Arg	нта
			100					105					110		
Arg	Ala	Lys	Trp	Glu	Ala	Trp	Ser	Ala	Lys	Lys	Gly	Ala	Ser	Lys	Met
		115					120					125			
Asp	Ala	Met	Arg	Gly	Tyr	Ala	Ala	Lys	Val	Glu	Glu	Leu	Thr	Lys	Lys
	130					135					140				
Glu	Val	Gly	Gly	Val	Glu	Arg	Glu	Gln	Arg	Gly	Val	Gln	Asp	Gly	Arg
145					150					155					160
His	Glu	Gly	Leu	Arg	Gly	Gln	Ser	Gly	Gly	Ala	Asp	Glu	Glu	Gly	Ser
				165					170		_			175	
				_											
<b>C1</b>	C1	7 ~~	C1	7.7.~	71 ***	mb	T	C1	71 22-	Dana	7. 22.2	Шэ	m\	Dwa	
дТĀ	σтλ	Arg		ATG	Arg	1111	гÀг		Arg	Pro	Arg	rrp	Thr	Pro	
			180					185					190		

<210> 152

<211> 687

<212> DNA

<213> Homo sapiens

<400> 152

atggagagac caggagccac ggcggccgcg cttaggcctg ctcacaacct ccgcccggcc 60 ccgcccacag cctccgccgc gcacgcgcag tcctcacgaa cgagcgcgc aagcgcacag 120 cgccgccttc cggcagagcc ctcccaccag ccctcagcac cagggaccgc ctccaccac 180 ccatgtgcca agtggagttc gagctgcgcg gccctcaagc agctgaaggg tcccgtggagc 240 gatcaggaga agctgctggt ctacggcttg tacaaacagg ccacccaggg cgactgcgac 300 atccccggcc ctccggcctc agacgtgaga gccagggcca agtgggaggc ttggagcgg 360 aacaaagggg cgtccaagat ggacgccatg aggggctacg cggccaaagt ggagggctg 420 acgaagaagg aagtggggg cgtggagcc gaacaaaggg gcgtgcaaga tggacgcat 480 gaggggctac gcggccaaag tggaggagct gacgaagaag gaagggcgtc caagatggac 540 gccatgaggg gctacgcgg caaagtggag cgaggagcg caaagtggag ggcgggaac aaaggggcgt ccaagatgga cgcaagatgga gagctgacga agaaggagcg caagggggcgt 600 gagcgcgaac aaaggggcg tcgctga

<210> 153

<211> 99

<212> PRT

<213> Homo sapiens

<400> 153

Met Cys Gln Val Glu Phe Glu Leu Arg Gly Pro Gln Ala Ala Glu Gly
1 5 10 15

Ser Arg Glu Arg Ser Gly Glu Ala Ala Gly Leu Arg Leu Val Gln Thr 20 25 30

Gly His Pro Gly Arg Leu Arg His Pro Arg Pro Ser Gly Leu Arg Arg
35 40 45

Glu Ser Gln Gly Gln Val Gly Gly Leu Glu Arg Glu Gln Arg Gly Val

50

55

60

Gln Asp Gly Arg His Glu Gly Leu Arg Gly Gln Ser Gly Gly Ala Asp 65 70 75 80

Glu Glu Gly Ser Gly Gly Arg Gly Ala Arg Thr Lys Gly Arg Ala Arg 85 90 95

Trp Thr Pro

<210> 154

<211> 99

<212> PRT

<213> Homo sapiens

<220>

<221> VARIANT

<222> (61)

<223> wherein Xaa is any amino acid

<400> 154

Met Cys Gln Val Glu Phe Glu Leu Arg Gly Pro Gln Ala Ala Glu Gly
1 5 10 15

Ser Arg Glu Arg Ser Gly Glu Ala Ala Gly Leu Arg Leu Val Gln Thr 20 25 30

Gly His Pro Gly Arg Leu Arg His Pro Arg Pro Ser Gly Leu Arg Arg
35 40 45

Glu Ser Gln Gly Gln Val Gly Gly Leu Glu Arg Glu Xaa Arg Gly Val
50 55 60

Gln Asp Gly Arg His Glu Gly Leu Arg Gly Gln Ser Gly Gly Ala Asp
65 70 75 80

Glu Glu Gly Ser Gly Gly Arg Gly Ala Arg Thr Lys Gly Arg Ala Arg 85 90 95

Trp Thr Pro

<210> 155

<211> 66

<212> PRT

<213> Homo sapiens

<220>

<221> VARIANT

<222> (25)

<223> wherein Xaa is any amino acid

<400> 155

Met Cys Gln Val Glu Phe Glu Leu Ala His Thr Ala Leu Lys Gln Leu 1 5 10 15

Lys Gly Thr Val Cys Asp Gln Glu Xaa Thr Ala Gly Val Gln Leu Leu 20 25 30

Gln Thr Ala His Pro Glu Arg Leu Gln His Pro Cys Pro Phe Ser Leu 35 40 45

Arg Cys Glu Ser Gln Gly Gln Val Gly Gly Met Glu Cys Glu Gln Arg
50 55 60

Asp Val

<210> 156

<211> 687

<212> DNA

<213> Homo sapiens

<400> 156

atgggagacg caggagccac ggcggccgcg cttaggcctg ctcacaacct ccgcccggcc 60 ccgcccacag cctccgccg gcacgcgcag tcctcacgaa cgagggcgcc aagcgcacag 120 cgccgccttc cggcagagcc ctcccaccag ccctcagcac cagggaccgc ctccaccacc 180 ccatgtgcca agtggagttc gagctgcgcg gccctcaagc agctgaaggg tcccgtgagc 240 gatcaggaga agctgctggt ctacggcttg tacaaacagg ccacccaggg cgactgcgac 300 atccccggcc ctccagcac agacgtgaga gccagggcca agtgggaggc ttggaggcgg 360 aacaaagggg cgtccaagat ggacgccatg aggggctacg cggccaaagt ggaggagctg 420 acgaagaagg aagtggggg cgtggaggc gaacaaaggg gcgtgcaaga tggacgccat 480 gaggggctac gcggccaaag tggaggagct gacgaagaag gaagggcgtc caagatggac 540

gccatgaggg gctacgcggc caaagtggag gagctgacga agaaggaagt ggggggcgtg 600
gagcgcgaac aaaggggcgt ccaagatgga cgccatgagg ggctacgcgg ccagagtgag 660
gagatgagga agaaggaggc tggctga 687

<210> 157

<211> 228

<212> PRT

<213> Homo sapiens

<400> 157

Met Gly Asp Ala Gly Ala Thr Ala Ala Ala Leu Arg Pro Ala His Asn
1 5 10 15

Leu Arg Pro Ala Pro Pro Thr Ala Ser Ala Ala His Ala Gln Ser Ser
20 25 30

Arg Thr Ser Ala Pro Ser Ala Gln Arg Arg Leu Pro Ala Glu Pro Ser
35 40 45

His Gln Pro Ser Ala Pro Gly Thr Ala Ser Thr Thr Pro Cys Ala Lys
50 55 60

Trp Ser Ser Ser Cys Ala Ala Leu Lys Gln Leu Lys Gly Pro Val Ser
65 70 75 80

Ala Lys Trp Glu Ala Trp Ser Ala Asn Lys Gly Ala Ser Lys Met Asp 115 120 125

Ala Met Arg Gly Tyr Ala Ala Lys Val Glu Glu Leu Thr Lys Lys Glu 130 135 140

Val Gly Gly Val Glu Arg Glu Gln Arg Gly Val Gln Asp Gly Arg His 145 150 155 160

Glu Gly Leu Arg Gly Gln Ser Gly Gly Ala Asp Glu Glu Gly Arg Ala 165 170 175

Ser Lys Met Asp Ala Met Arg Gly Tyr Ala Ala Lys Val Glu Glu Leu 180 185 190

Thr Lys Lys Glu Val Gly Gly Val Glu Arg Glu Gln Arg Gly Val Gln
195 200 205

Asp Gly Arg His Glu Gly Leu Arg Gly Gln Ser Glu Glu Met Arg Lys 210 215 220

<210> 158

225

<211> 87

<212> PRT

<213> Bos taurus

<400> 158

Met Cys Gln Val Glu Phe Glu Met Ala Cys Ala Ala Ile Lys Gln Leu 1 5 10 15

Lys Gly Pro Val Ser Asp Gln Glu Lys Leu Leu Val Tyr Ser Tyr Tyr 20 25 30

Lys Gln Ala Thr Gln Gly Asp Cys Asn Ile Pro Ala Pro Pro Ala Thr 35 40 45

Asp Leu Lys Ala Lys Ala Lys Trp Glu Ala Trp Asn Glu Asn Lys Gly 50 55 60

Met Ser Lys Met Asp Ala Met Arg Ile Tyr Ile Ala Lys Val Glu Glu 65 70 75 80

Leu Lys Lys Asn Glu Ala Gly

<210> 159

<211> 87

<212> PRT

<213> Mus musculus

<400> 159

Met Ser Gln Val Glu Phe Glu Met Ala Cys Ala Ser Leu Lys Gln Leu 1 5 10 15

Lys Gly Pro Val Ser Asp Gln Glu Lys Leu Leu Val Tyr Ser Phe Tyr
20 25 30

Lys Gln Ala Thr Gln Gly Asp Cys Asn Ile Pro Val Pro Pro Ala Thr

40

Asp Val Arg Ala Lys Ala Lys Tyr Glu Ala Trp Met Val Asn Lys Gly 55

45

Met Ser Lys Met Asp Ala Met Arg Ile Tyr Ile Ala Lys Val Glu Glu

Leu Lys Lys Glu Pro Cys

35

<210> 160

<211> 87

<212> PRT

<213> Rattus norvegicus

<400> 160

Met Ser Gln Val Glu Phe Glu Met Ala Cys Ala Ser Leu Lys Gln Leu

Lys Gly Pro Leu Ser Asp Gln Glu Lys Leu Leu Val Tyr Ser Phe Tyr

Lys Gln Ala Thr Gln Gly Asp Cys Asn Ile Pro Val Pro Pro Ala Thr

Asp Val Lys Ala Lys Ala Lys Trp Glu Ala Trp Met Val Asn Lys Gly

Met Ser Lys Met Asp Ala Met Arg Ile Tyr Ile Ala Lys Val Glu Glu 65 70

Leu Lys Lys Asn Glu Thr Cys

<210> 161

<211> 80

<212> PRT

<213> Callithrix Jacchus

<400> 161

Leu Ala Arg Thr Ala Leu Lys Gln Leu Lys Gly Pro Leu Ser Asp Gln

Asp Lys Leu Leu Tyr Gly Trp Tyr Lys Gln Ala Thr Arg Gly Asp

20 25 30

Cys His Leu Pro Ala Pro Pro Ala Ser Asp Leu Lys Ala Lys Ala Lys 35 40 45

Trp Glu Ala Trp Thr Ala Asn Gln Gly Leu Ser Arg Met Asp Ala Met 50 55 60

Arg Ala Tyr Val Ala Lys Val Glu Glu Leu Thr Arg Lys Glu Ala Gly 65 70 75 80

<210> 162

<211> 59

<212> PRT

<213> Macaca fascicularis

<400> 162

Leu Ala Arg Ala Ala Leu Lys Gln Leu Lys Gly Pro Val Ser Asp Pro

1 10 15

Glu Lys Leu Leu Ile Tyr Gly Leu Tyr Lys Gln Ala Thr Gln Gly Asp 20 25 30

Cys Gly Ile Pro Ala Pro Pro Ala Ser Asp Val Lys Ala Arg Ala Lys
35 40 45

Trp Glu Ala Trp Ser Ala Asn Lys Gly Val Ser 50 55

<210> 163

<211> 89

<212> PRT

<213> Homo sapiens

<400> 163

Leu Gln Glu Asp Phe Glu Ala Ala Ala Glu Lys Val Lys Lys Leu Lys

1 5 10 15

Lys Asn Gly Pro Val Lys Pro Ser Asn Glu Glu Lys Leu Lys Leu Tyr
20 25 30

Ser Leu Tyr Lys Gln Ala Thr Val Gly Asp Val Asn Thr Glu Arg Pro 35 40 45

Gly Met Phe Asp Leu Lys Gly Arg Ala Lys Trp Asp Ala Trp Asn Glu

50 55 60
Leu Lys Gly Met Ser Lys Glu Glu Ala Met Lys Ala Tyr Ile Ala Lys
65 70 75 80

Val Glu Glu Leu Ile Ala Lys Tyr Ala 85

<210> 164

<211> 77

<212> PRT

<213> Homo sapiens

<400> 164

Cys Ala Ala Leu Lys Gln Leu Lys Gly Pro Val Ser Asp Gln Glu Lys

1 5 10 15

Leu Leu Val Tyr Gly Leu Tyr Lys Gln Ala Thr Gln Gly Asp Cys Asp 20 25 30

Ile Pro Gly Pro Pro Ala Ser Asp Val Arg Ala Arg Ala Lys Trp Glu 35 40 45

Ala Trp Ser Ala Asn Lys Gly Ala Ser Lys Met Asp Ala Met Arg Gly
50 55 60

Tyr Ala Ala Lys Val Glu Glu Leu Thr Lys Lys Glu Val 65 70 75

<210> 165

<211> 330

<212> DNA

<213> Homo sapiens

<400> 165

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<210> 166

<211> 88

<212> PRT

<213> Homo sapiens

<400> 166

Met Ser Leu Gln Ala Asp Phe Asp Met Val Thr Glu Asp Val Arg Lys
1 5 10 15

Leu Lys Thr Arg Pro Asp Asp Glu Glu Leu Lys Glu Leu Tyr Gly Leu 20 25 30

Tyr Lys Gln Ala Val Ile Gly Asn Ile Asn Ile Glu Cys Ser Glu Met
35 40 45

Leu Glu Leu Lys Gly Lys Ala Lys Trp Glu Ala Gln Asn Pro Gln Lys 50 55 60

Gly Leu Ser Glu Glu Asp Met Met Arg Ala Phe Ile Ser Lys Ala Glu 65 70 75 80

Glu Leu Ile Glu Lys Tyr Gly Ile

<210> 167

<211> 88

<212> PRT

<213> Mus musculus

<400> 167

Met Ser Leu Gln Ala Asp Phe Asp Gln Ala Ala Gln Asp Val Arg Lys

1 5 10 15

Leu Lys Ser Arg Pro Glu Asp Glu Glu Leu Lys Glu Leu Tyr Gly Leu 20 25 30

Tyr Lys Gln Ser Val Ile Gly Asp Ile Asn Ile Ala Cys Pro Ala Met
35 40 45

Leu Asp Leu Lys Gly Lys Ala Lys Cys Glu Ala Trp Asn Leu Gln Lys 50 55 60

Gly Leu Ser Lys Glu Asp Ala Met Cys Ala Tyr Ile Ser Lys Ala Arg 70 Glu Leu Ile Glu Lys Tyr Gly Ile 85 <210> 168 <211> 88 <212> PRT <213> laughing frog <400> 168 Met Ser Pro Gln Ala Asp Phe Asp Lys Ala Ala Gly Asp Val Lys Leu Lys Thr Lys Pro Thr Asp Asp Glu Leu Lys Glu Leu Tyr Gly Leu Tyr Lys Gln Ser Thr Val Gly Asp Ile Asn Ile Glu Cys Pro Gly Met Leu Asp Leu Lys Gly Lys Ala Lys Trp Asp Ala Trp Asn Leu Lys Lys Gly Leu Ser Lys Glu Asp Ala Met Ser Ala Tyr Val Ser Lys Ala His Glu Leu Ile Glu Lys Tyr Gly Leu <210> 169 <211> 103 <212> PRT <213> Anas platrhynchos <400> 169 Met Phe Gln Ala His Leu Leu Arg Gly Thr Leu Thr Leu Ser Phe Phe 5 Leu His Gln Ala Asp Phe Asp Glu Ala Ala Glu Glu Val Lys Lys Leu

Lys Thr Arg Pro Thr Asp Glu Glu Leu Lys Glu Leu Tyr Gly Phe Tyr
35 40 45

Lys Gln Ala Thr Val Gly Asp Ile Asn Ile Glu Cys Pro Gly Met Leu 50 55 60

Asp Leu Lys Gly Lys Ala Lys Trp Glu Ala Trp Asn Leu Lys Lys Gly 65 70 75 80

Ile Ser Lys Glu Asp Ala Met Asn Ala Tyr Ile Ser Lys Ala Lys Thr 85 90 95

Met Val Glu Lys Tyr Gly Ile 100

<210> 170

<211> 87

<212> PRT

<213> Rana ridibunda

<400> 170

Ser Pro Gln Ala Asp Phe Asp Lys Ala Ala Gly Asp Val Lys Leu 1 5 10 15

Lys Thr Lys Pro Thr Asp Asp Glu Leu Lys Glu Leu Tyr Gly Leu Tyr
20 25 30

Lys Gln Ser Thr Val Gly Asp Ile Asn Ile Glu Cys Pro Gly Met Leu 35 40 45

Asp Leu Lys Gly Lys Ala Lys Trp Asp Ala Trp Asn Leu Lys Lys Gly 50 55 60

Leu Ser Lys Glu Asp Ala Met Ser Ala Tyr Val Ser Lys Ala His Glu 65 70 75 80

Leu Ile Glu Lys Tyr Gly Leu

<210> 171

<211> 86

<212> PRT

<213> Homo sapiens

<400> 171

Ser Gln Ala Glu Phe Glu Lys Ala Ala Glu Glu Val Arg His Leu Lys

1 5

10

Thr Lys Pro Ser Asp Glu Glu Met Leu Phe Ile Tyr Gly His Tyr Lys 25

15

Gln Ala Thr Val Gly Asp Ile Asn Thr Glu Arg Pro Gly Met Leu Asp

Phe Thr Gly Lys Ala Lys Trp Asp Ala Trp Asn Glu Leu Lys Gly Thr

Ser Lys Glu Asp Ala Met Lys Ala Tyr Ile Asn Lys Val Glu Glu Leu

Lys Lys Lys Tyr Gly Ile

<210> 172

<211> 89

<212> PRT

<213> Homo sapiens

<400> 172

Leu Gln Glu Asp Phe Glu Ala Ala Ala Glu Lys Val Lys Lys Leu Lys

Lys Asn Gly Pro Val Lys Pro Ser Asn Glu Glu Lys Leu Lys Leu Tyr

Ser Leu Tyr Lys Gln Ala Thr Val Gly Asp Val Asn Thr Glu Arg Pro

Gly Met Phe Asp Leu Lys Gly Arg Ala Lys Trp Asp Ala Trp Asn Glu

55 Leu Lys Gly Met Ser Lys Glu Glu Ala Met Lys Ala Tyr Ile Ala Lys

Val Glu Glu Leu Ile Ala Lys Tyr Ala 85

<210> 173

<211> 85

<212> PRT

<213> Homo sapiens

<400> 173

Leu Gln Ala Asp Phe Asp Met Val Thr Glu Asp Val Arg Lys Leu Lys
1 10 15

Thr Arg Pro Asp Asp Glu Glu Leu Lys Glu Leu Tyr Gly Leu Tyr Lys 20 25 30

Gln Ala Val Ile Gly Asn Ile Asn Ile Glu Cys Ser Glu Met Leu Glu 35 40 45

Leu Lys Gly Lys Ala Lys Trp Glu Ala Gln Asn Pro Gln Lys Gly Leu 50 55 60

Ser Glu Glu Asp Met Met Arg Ala Phe Ile Ser Lys Ala Glu Glu Leu
65 70 75 80

Ile Glu Lys Tyr Gly

<210> 174

<211> 1049

<212> DNA

<213> Homo sapiens

<400> 174

taatgggcgc acaacatata aagatataat ttgtgacaat cacaacataa agtatgggca 60 gcgctgtata gagctataga gcagagattt ttgtatgcta tcaaagctaa atttggatca 120 atttaaacta ggttgttata aatttatgaa gttgattacc tctgtggtaa ccacttaaaaa 180 tttttttaat tttaattttt atttatttt tgagacggag tctcactctg tctctaaaaa 240 aaggtcaaga aaattagaag ggtattaaat gatacactac aaaaaaaaat caatggaata 300 caaaagaagg cagtagtgga ggaaatgagg aacaaaaaatg gtataagaca tacagaagga 360 atgcctggag agcagcaaca gcccagctgc ggccaccatg tccctgcagg ctgattttga 420 catggtcaca gaagatgtga ggaagctgaa aacaagacca gatgatggag aactgaaaga 480 actctatggg ctttacaaac aagctgtaat tggaaacatt aatattgagt gttcagaaat 540 gctagattta aaaggcaaag ccaaatggga agcatggaac ccccaaaaag gattgtcgac 600 ggaagatatg atgcgtgcct ttattctaa agccgaagag ctgatagaaa aatatggaat 660

ttagaataaa gcatatgata aattttcctt tttgaagcct tcataatggt atcatgacca 720
aacatttaga gttaacgctg ttaactctag gtatcatgta tatttttgct attattatga 780
attatactta attagtagta tgctaaaact gcatagttaa ctaaattgta cttgcttaaa 840
ccaggtgtct ttaaaagttc ttttagaaaa gtatttttt tattttata gatttagggg 900
gtacaagtgc agttttgttg catgaacgta tcatgtagtg gtgaagtctg ggctttcagt 960
gtccccatca cccagatagt ctacaattgt gcccaaaagg tacaattgta cattccttac 1020
accttctgtg accatgtcaa aatcagcct

<210> 175

<211> 88

<212> PRT

<213> Homo sapiens

<400> 175

Met Ser Leu Gln Ala Asp Phe Asp Met Val Thr Glu Asp Val Arg Lys

1 10 15

Leu Lys Thr Arg Pro Asp Asp Gly Glu Leu Lys Glu Leu Tyr Gly Leu 20 25 30

Tyr Lys Gln Ala Val Ile Gly Asn Ile Asn Ile Glu Cys Ser Glu Met 35 40 45

Leu Asp Leu Lys Gly Lys Ala Lys Trp Glu Ala Trp Asn Pro Gln Lys 50 55 60

Gly Leu Ser Thr Glu Asp Met Met Arg Ala Phe Ile Ser Lys Ala Glu
65 70 75 80

Glu Leu Ile Glu Lys Tyr Gly Ile

<210> 176

<211> 89

<212> PRT

<213> Homo sapiens

<400> 176

Leu Gln Glu Asp Phe Glu Ala Ala Ala Glu Lys Val Lys Lys Leu Lys

Lys Asn Gly Pro Val Lys Pro Ser Asn Glu Glu Lys Leu Lys Leu Tyr
20 25 30

Ser Leu Tyr Lys Gln Ala Thr Val Gly Asp Val Asn Thr Glu Arg Pro 35 40 45

Gly Met Phe Asp Leu Lys Gly Arg Ala Lys Trp Asp Ala Trp Asn Glu

50 55 60
Leu Lys Gly Met Ser Lys Glu Glu Ala Met Lys Ala Tyr Ile Ala Lys

Val Glu Glu Leu Ile Ala Lys Tyr Ala

<210> 177

<211> 85

<212> PRT

<213> Homo sapiens

<400> 177

Leu Gln Ala Asp Phe Asp Met Val Thr Glu Asp Val Arg Lys Leu Lys

1 10 15

Thr Arg Pro Asp Asp Gly Glu Leu Lys Glu Leu Tyr Gly Leu Tyr Lys 20 25 30

Gln Ala Val Ile Gly Asn Ile Asn Ile Glu Cys Ser Glu Met Leu Asp 35 40 45

Leu Lys Gly Lys Ala Lys Trp Glu Ala Trp Asn Pro Gln Lys Gly Leu 50 55 60

Ser Thr Glu Asp Met Met Arg Ala Phe Ile Ser Lys Ala Glu Glu Leu 65 70 75 80

Ile Glu Lys Tyr Gly

<210> 178

<211> 297

<212> DNA

<213> Homo sapiens

<400> 178

tcttccttaa ggctgattt gacagggctg cagaagatgt gaggaagctg aaagcaagac 60 cagatgatgg agaactgaaa gaactctatg ggctttacaa acaagcaata gttggagaca 120 ttaatattgc gtgtccagga atgctagatt taaaaggcaa agccaaatgg gaagcatgga 180 acctcaaaaa agggttgtcg acggaagatg cgacgagtgc ctatatttct aaagcaaagg 240 agctgataga aaaatacgga atttagaata cagcatatga ggaatttttc ctttga 297

<210> 179

<211> 87

<212> PRT

<213> Homo sapiens

<400> 179

Phe Leu Lys Ala Asp Phe Asp Arg Ala Ala Glu Asp Val Arg Lys Leu

1 5 10 15

Lys Ala Arg Pro Asp Asp Gly Glu Leu Lys Glu Leu Tyr Gly Leu Tyr
20 25 30

Lys Gln Ala Ile Val Gly Asp Ile Asn Ile Ala Cys Pro Gly Met Leu 35 40 45

Asp Leu Lys Gly Lys Ala Lys Trp Glu Ala Trp Asn Leu Lys Lys Gly 50 55 60

Leu Ser Thr Glu Asp Ala Thr Ser Ala Tyr Ile Ser Lys Ala Lys Glu 65 70 75 80

Leu Ile Glu Lys Tyr Gly Ile 85

<210> 180

<211> 89

<212> PRT

<213> Homo sapiens

<400> 180

Leu Gln Glu Asp Phe Glu Ala Ala Glu Lys Val Lys Leu Lys

1 10 15

Lys Asn Gly Pro Val Lys Pro Ser Asn Glu Glu Lys Leu Lys Leu Tyr
20 25 30

Ser Leu Tyr Lys Gln Ala Thr Val Gly Asp Val Asn Thr Glu Arg Pro

35

40

45

Gly Met Phe Asp Leu Lys Gly Arg Ala Lys Trp Asp Ala Trp Asn Glu

55 60

Leu Lys Gly Met Ser Lys Glu Glu Ala Met Lys Ala Tyr Ile Ala Lys

Val Glu Glu Leu Ile Ala Lys Tyr Ala 85

<210> 181

<211> 85

<212> PRT

<213> Homo sapiens

<400> 181

Leu Lys Ala Asp Phe Asp Arg Ala Ala Glu Asp Val Arg Lys Leu Lys

Ala Arg Pro Asp Asp Gly Glu Leu Lys Glu Leu Tyr Gly Leu Tyr Lys

Gln Ala Ile Val Gly Asp Ile Asn Ile Ala Cys Pro Gly Met Leu Asp

Leu Lys Gly Lys Ala Lys Trp Glu Ala Trp Asn Leu Lys Lys Gly Leu

Ser Thr Glu Asp Ala Thr Ser Ala Tyr Ile Ser Lys Ala Lys Glu Leu

Ile Glu Lys Tyr Gly

<210> 182

<211> 428

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1)..(318)

<223> wherein n is a g or t

<400> 182

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taccttctca gtgggctccc aggaatcctt gcaacaactg ccagtatgtc tcaggcgttt 120
gagaaagctg ccaaggatat taagcacctt gagaccaagc cagcagatga tgagaggatg 180
ttcatctaca gccgctgcaa acaagcgact gtgcatgact taaatacaga atggcccagg 240
atgttagacc tcaaaggcaa ggcaaagcag gatgctggna atgagctgaa agacactgcc 300
aaggaagatg ctgtgaaagc tgatatcaac aaagtagaag agcgaaataa aaaatacaga 360
atataagaga ttggatttgg ttgccagcan tgcatttaac ctaaactgat acaatgcctt 420
tttttccc 428

<210> 183

<211> 86

<212> PRT

<213> Homo sapiens

<400> 183

Met Ser Gln Ala Phe Glu Lys Ala Ala Lys Asp Ile Lys His Leu Glu
1 5 10 15

Thr Lys Pro Ala Asp Asp Glu Arg Met Phe Ile Tyr Ser Arg Cys Lys 20 25 30

Gln Ala Thr Val His Asp Leu Asn Thr Glu Trp Pro Arg Met Leu Asp 35 40 45

Leu Lys Gly Lys Ala Lys Gln Asp Ala Gly Asn Glu Leu Lys Asp Thr 50 55 60

Ala Lys Glu Asp Ala Val Lys Ala Asp Ile Asn Lys Val Glu Glu Arg 65 70 75 80

Asn Lys Lys Tyr Arg Ile

<210> 184

<211> 87

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic

construct; chemically synthesized

<400> 184

Met Ser Gln Ala Glu Phe Asp Lys Ala Ala Glu Glu Val Lys His Leu 1 5 10 15

Lys Thr Lys Pro Ala Asp Glu Glu Met Leu Phe Ile Tyr Ser His Tyr
20 25 30

Lys Gln Ala Thr Val Gly Asp Ile Asn Thr Glu Arg Pro Gly Met Leu 35 40 45

Asp Phe Lys Gly Lys Ala Lys Trp Asp Ala Trp Asn Glu Leu Lys Gly 50 55 60

Thr Ser Lys Glu Asp Ala Met Lys Ala Tyr Ile Asp Lys Val Glu Glu 65 70 75 80

Leu Lys Lys Lys Tyr Gly Ile

<210> 185

<211> 87

<212> PRT

<213> Sus scrofa

<400> 185

Met Ser Gln Ala Glu Phe Glu Lys Ala Ala Glu Glu Val Lys Asn Leu

1 5 10 15

Lys Thr Lys Pro Ala Asp Asp Glu Met Leu Phe Ile Tyr Ser His Tyr
20 25 30

Lys Gln Ala Thr Val Gly Asp Ile Asn Thr Glu Arg Pro Gly Ile Leu
35 40 45

Asp Leu Lys Gly Lys Ala Lys Trp Asp Ala Trp Asn Gly Leu Lys Gly 50 55 60

Thr Ser Lys Glu Asp Ala Met Lys Ala Tyr Ile Asn Lys Val Glu Glu 65 70 75 80

Leu Lys Lys Tyr Gly Ile 85													
<210> 186													
<211> 86													
<212> PRT													
<213> Canis familiaris													
<400> 186													
Ser Gln Ala Glu Phe Asp Lys Ala Ala Glu Asp Val Lys His Leu Lys 1 5 10 15													
Thr Lys Pro Ala Asp Asp Glu Met Leu Tyr Ile Tyr Ser His Tyr Lys 20 25 30													
Gln Ala Thr Val Gly Asp Ile Asn Thr Glu Arg Pro Gly Leu Leu Asp 35 40 45													
Leu Arg Gly Lys Ala Lys Trp Asp Ala Trp Asn Gln Leu Lys Gly Thr 50 55 60													
Ser Lys Glu Asp Ala Met Lys Ala Tyr Val Asn Lys Val Glu Asp Leu 65 70 75 80													
Lys Lys Tyr Gly Ile 85													
<210> 187													
<211> 86													
<212> PRT													
<213> Bos taurus													
<400> 187													
Ser Gln Ala Glu Phe Asp Lys Ala Ala Glu Glu Val Lys His Leu Lys 1 5 10 15													
Thr Lys Pro Ala Asp Glu Glu Met Leu Phe Ile Tyr Ser His Tyr Lys 20 25 30													
Gln Ala Thr Val Gly Asp Ile Asn Thr Glu Arg Pro Gly Met Leu Asp 35 40 45													
Phe Lys Gly Lys Ala Lys Trp Asp Ala Trp Asn Glu Leu Lys Gly Thr 50 55 60													
Ser Lys Glu Asp Ala Met Lys Ala Tyr Ile Asp Lys Val Glu Glu Leu 65 70 75 80													

Lys Lys Lys Tyr Gly Ile <210> 188 <211> 86 <212> PRT <213> Sus scrofa <400> 188 Ser Gln Ala Glu Phe Glu Lys Ala Ala Glu Glu Val Lys Asn Leu Lys Thr Lys Pro Ala Asp Asp Glu Met Leu Phe Ile Tyr Ser His Tyr Lys Gln Ala Thr Val Gly Asp Ile Asn Thr Glu Arg Pro Gly Ile Leu Asp 45 Leu Lys Gly Lys Ala Lys Trp Asp Ala Trp Asn Gly Leu Lys Gly Thr Ser Lys Glu Asp Ala Met Lys Ala Tyr Ile Asn Lys Val Glu Glu Leu Lys Lys Lys Tyr Gly Ile <210> 189 <211> 89 <212> PRT <213> Homo sapiens <400> 189 Leu Gln Glu Asp Phe Glu Ala Ala Ala Glu Lys Val Lys Lys Leu Lys Lys Asn Gly Pro Val Lys Pro Ser Asn Glu Glu Lys Leu Lys Leu Tyr Ser Leu Tyr Lys Gln Ala Thr Val Gly Asp Val Asn Thr Glu Arg Pro Gly Met Phe Asp Leu Lys Gly Arg Ala Lys Trp Asp Ala Trp Asn Glu

Leu Lys Gly Met Ser Lys Glu Glu Ala Met Lys Ala Tyr Ile Ala Lys

Val Glu Glu Leu Ile Ala Lys Tyr Ala 85

<210> 190

<211> 85

<212> PRT

<213> Homo sapiens

<400> 190

Met Ser Gln Ala Phe Glu Lys Ala Ala Lys Asp Ile Lys His Leu Glu
1 5 10 15

Thr Lys Pro Ala Asp Asp Glu Arg Met Phe Ile Tyr Ser Arg Cys Lys 20 25 30

Gln Ala Thr Val His Asp Leu Asn Thr Glu Trp Pro Arg Met Leu Asp 35 40 45

Leu Lys Gly Lys Ala Lys Gln Asp Ala Gly Asn Glu Leu Lys Asp Thr 50 55 60

Ala Lys Glu Asp Ala Val Lys Ala Asp Ile Asn Lys Val Glu Glu Arg 65 70 75 80

Asn Lys Lys Tyr Arg

<210> 191

<211> 1979

<212> DNA

<213> Homo sapiens

<400> 191

agtaggaage egegggtgg tggegagaga ggacceaggt gteetageag tgggegeege 60 ggggeacaeg etgggeeaag gtgeaggegg eeagggtggg agactgtteg eeeegeetg 120 agtacteeta tettgtttet eeacetgtte gggagttgga gatgtgeace taaaggagge 180 geatetgggg aeggaeacat etggeactga ggeeetegee acetgeeteg eeacetggeg 240

accetgacce caccacactg cettgaggta ggaaaaggag geteetcaac cacaacttet 300 gacctcccag ggtgtctgag gcctctaaag agcttagttt gcccctctgg gaagtgaatc 360 ettggettat ggtgeegggg ggaeeetgga ggeeeeetea eaegaagget gettettgea 420 gagtegetea aaagtaggge eecagggete geageageat gggeaeegag aaagaaagee 480 cagagecega etgecagaaa cagttecagg etgeagtgag egteatecag aacetgeeca 540 agaacggttc ttaccgcccc tcctatgaag agatgctgcg attctacagt tactacaagc 600 aggccaccat ggggccctgc ctggtccccc ggcccgggtt ctgggacccc attggacgat 660 ataagtggga cgcctggaac agtctgggca agatgagcag ggaggaggcc atgtctgcct 720 acatcactga aatgaaactg gtggcacaga aggtgatcga cacagtgccc ctgggtgagg 780 tggcagagga catgtttggt tacttcgagc ccctgtacca ggtgatccct gacatgccga 840 ggcccccaga gaccttcctg agaagggtca caggttggaa agagcaggtt gtgaatggag 900 atgttggggc tgtttcagag cctccctgcc tccccaagga accggcaccc ccaagcccag 960 agteceatte acceagggae etggaeteeg aggttttetg tgatteeetg gageagetgg 1020 agcctgagct ggtttggaca gagcagcggg cagcatctgg aggaaagcgt gatcccagga 1080 acageceegt geeeceeaca aagaaagagg ggttgegggg cageeegeeg gggeeeeagg 1140 agttggacgt gtggctgctg gggacagttc gagcactaca ggagagcatg caggaggtgc 1200 aggegagggt geagageetg gagageatge eeeggeeeee tgageagagg eegeageeea 1260 ggcccagtgc teggccatgg ccccttgggc teceggggcc egegctgctc ttcttcctcc 1320 tgtggccctt cgtcgtccag tggctcttcc gaatgtttcg gacccaaaag aggtgactgt 1380 cagtggaggg gtctctgcag ccaactgaga ctatcttgct gtgccctgag ccttcctagg 1440 gtttagaaga acagcattca aaattccccg tcctgtcagt gtttgccttc gcacctcctc 1500 ccctaaagca gcgcgggggg caaataagac cccacccctc cctgcagctt cacagggacg 1560 ettecttece teccegeaac caccecagge teccetggga ggetgeagtt gtggtacacg 1620 tecceggtge tgggttggce gtgaeteggg ggeggggega tegggtetea geeeetgeet 1680 tececagtet etgggteace egaattttee caeceetget teteceegag gaggttgage 1740 tettgageaa gttgggaett gggetgggge etggaagaat gattggetgg gaggeegegg 1800 gagggaggcc aggaggcccg gaccagttgg gaggagtgag caggccccgg gggaggggga 1860 tgagegeagt ttgetegett teeteeeetg eeggeeeeet eegeeeeeae acaeaetegg 1920

gaco	tctt	ca t	tgaa	agatt	c ac	ttac	caaag	g gaa	atgtt	tca	ctaa	aataa	aaa q	gaaaa	accag	1979
<210	)> 19	92														
<211	.> 30	)5														
<212	2> PI	RΤ														
<213	3> Ho	omo s	sapie	ens												
<400> 192  Met Gly Thr Glu Lys Glu Ser Pro Glu Pro Asp Cys Gln Lys Gln Phe																
Met 1	Gly	Thr	Glu	Lys 5	Glu	Ser	Pro	Glu	Pro 10	Asp	Cys	Gln	Lys	Gln 15	Phe	
Gln	Ala	Ala	Val 20	Ser	Val	Ile	Gln	Asn 25	Leu	Pro	Lys	Asn	Gly 30	Ser	Tyr	
Arg	Pro	Ser 35	Tyr	Glu	Glu	Met	Leu 40	Arg	Phe	Tyr	Ser	Tyr 45	Tyr	Lys	Gln	
Ala	Thr 50	Met	Gly	Pro	Cys	Leu 55	Val	Pro	Arg	Pro	Gly 60	Phe	Trp	Asp	Pro	
Ile 65	Gly	Arg	Tyr	Lys	Trp 70	Asp	Ala	Trp	Asn	Ser 75	Leu	Gly	Lys	Met	Ser 80	
Arg	Glu	Glu	Ala	Met 85	Ser	Ala	Tyr	Ile	Thr 90	Glu	Met	Lys	Leu	Val 95	Ala	
Gln	Lys	Val	Ile 100	Asp	Thr	Val	Pro	Leu 105	Gly	Glu	Val	Ala	Glu 110	Asp	Met	
Phe	Gly	Tyr 115	Phe	Glu	Pro	Leu	Tyr 120	Gln	Val	Ile	Pro	Asp 125	Met	Pro	Arg	
Pro	Pro 130	Glu	Thr	Phe	Leu	Arg 135	Arg	Val	Thr	Gly	Trp 140	Lys	Glu	Gln	Val	
Val 145	Asn	Gly	Asp	Val	Gly 150	Ala	Val	Ser	Glu	Pro 155	Pro	Cys	Leu	Pro	Lys 160	
Glu	Pro	Ala	Pro	Pro 165	Ser	Pro	Glu	Ser	His 170	Ser	Pro	Arg	Asp	Leu 175	Asp	
Ser	Glu	Val	Phe 180	Cys	Asp	Ser	Leu	Glu 185	Gln	Leu	Glu	Pro	Glu 190	Leu	Val	
Trp	Thr	Glu 195	Gln	Arg	Ala	Ala	Ser 200	Gly	Gly	Lys	Arg	Asp 205	Pro	Arg	Asn	
Ser	Pro 210	Val	Pro	Pro	Thr	Lys 215	Lys	Glu	Gly	Leu	Arg 220	Gly	Ser	Pro	Pro	
Gly 225	Pro	Gln	Glu	Leu	Asp 230	Val	Trp	Leu	Leu	Gly 235	Thr	Val	Arg	Ala	Leu 240	

Gln Glu Ser Met Gln Glu Val Gln Ala Arg Val Gln Ser Leu Glu Ser 245 250 255

Met Pro Arg Pro Pro Glu Gln Arg Pro Gln Pro Arg Pro Ser Ala Arg 260 265 270

Pro Trp Pro Leu Gly Leu Pro Gly Pro Ala Leu Leu Phe Phe Leu Leu 275 280 285

Trp Pro Phe Val Val Gln Trp Leu Phe Arg Met Phe Arg Thr Gln Lys 290 295 300

Arg 305

<210> 193

<211> 305

<212> PRT

<213> Homo sapiens

<400> 193

Met Gly Thr Glu Lys Glu Ser Pro Glu Pro Asp Cys Gln Lys Gln Phe 1 5 10 15

Gln Ala Ala Val Ser Val Ile Gln Asn Leu Pro Lys Asn Gly Ser Tyr 20 25 30

Arg Pro Ser Tyr Glu Glu Met Leu Arg Phe Tyr Ser Tyr Tyr Lys Gln
35 40 45

Ala Thr Met Gly Pro Cys Leu Val Pro Arg Pro Gly Phe Trp Asp Pro 50 55 60

Ile Gly Arg Tyr Lys Trp Asp Ala Trp Asn Ser Leu Gly Lys Met Ser 65 70 75 80

Arg Glu Glu Ala Met Ser Ala Tyr Ile Thr Glu Met Lys Leu Val Ala 85 90 95

Gln Lys Val Ile Asp Thr Val Pro Leu Gly Glu Val Ala Glu Asp Met 100 105 110

Phe Gly Tyr Phe Glu Pro Leu Tyr Gln Val Ile Pro Asp Met Pro Arg 115 120 125

Pro Pro Glu Thr Phe Leu Arg Arg Val Thr Gly Trp Lys Glu Gln Val 130 135 140

Val Asn Gly Asp Val Gly Ala Val Ser Glu Pro Pro Cys Leu Pro Lys

Glu Pro Ala Pro Pro Ser Pro Glu Ser His Ser Pro Arg Asp Leu Asp 165 170 175

Ser Glu Val Phe Cys Asp Ser Leu Glu Glu Leu Glu Pro Glu Leu Val 180 185 190

Trp Thr Glu Gln Arg Ala Ala Ser Gly Gly Lys Arg Asp Pro Arg Asn 195 200 205

Ser Pro Val Pro Pro Thr Lys Lys Glu Gly Leu Arg Gly Ser Pro Pro 210 215 220

Gly Pro Gln Glu Leu Asp Val Trp Leu Leu Gly Thr Val Arg Ala Leu 225 230 235 240

Gln Glu Ser Met Gln Glu Val Gln Ala Arg Val Gln Ser Leu Glu Ser 245 250 255

Met Pro Arg Pro Pro Glu Gln Arg Pro Gln Pro Arg Pro Ser Ala Arg
260 265 270

Pro Trp Pro Leu Gly Leu Pro Gly Pro Ala Leu Leu Phe Phe Leu Leu 275 280 285

Trp Pro Phe Val Val Gln Trp Leu Phe Arg Met Phe Arg Thr Gln Lys 290 295 300

Arg 305

<210> 194

<211> 533

<212> PRT

<213> Bos taurus

<400> 194

Met Phe Gln Phe His Ala Gly Ser Trp Glu Ser Trp Cys Cys Cys 1 5 10 15

Cys Leu Ile Pro Gly Asp Arg Pro Trp Asp Arg Gly Arg Arg Trp Arg 20 25 30

Leu Glu Met Arg His Thr Arg Ser Val His Glu Thr Arg Phe Glu Ala

Ala Val Lys Val Ile Gln Ser Leu Pro Lys Asn Gly Ser Phe Gln Pro
50 55 60

Thr Asn Glu Met Met Leu Lys Phe Tyr Ser Phe Tyr Lys Gln Ala Thr

Glu	Gly	Pro	Cys	Lys 85	Leu	Ser	Lys	Pro	Gly 90	Phe	Trp	Asp	Pro	Val 95	Gly
Arg	Tyr	Lys	Trp 100	Asp	Ala	Trp	Ser	Ser 105	Leu	Gly	Asp	Met	Thr 110	Lys	Glu
Glu	Ala	Met 115	Ile	Ala	Tyr	Val	Glu 120	Glu	Met	Lys	Lys	Ile 125	Leu	Glu	Thr
Met	Pro 130	Met	Thr	Glu	Lys	Val 135	Glu	Glu	Leu	Leu	His 140	Val	Ile	Gly	Pro
Phe 145	Tyr	Glu	Ile	Val	Glu 150	Asp	Lys	Lys	Ser	Gly 155	Arg	Ser	Ser	Asp	Leu 160
Thr	Ser	Val	Arg	Leu 165	Glu	Lys	Ile	Ser	Lys 170	Cys	Leu	Glu	Asp	Leu 175	Gly
Asn	Val	Ŀeu	Ala 180	Ser	Thr	Pro	Asn	Ala 185	Lys	Thr	Val	Asn	Gly 190	Lys	Ala
Glu	Ser	Ser 195	Asp	Ser	Gly	Ala	Glu 200	Ser	Glu	Glu	Glu	Ala 205	Ala	Gln	Glu
Asp	Pro 210	Lys	Arg	Pro	Glu	Pro 215	Arg	Asp	Ser	Asp	Lys 220	Lys	Met	Met	Lys
Lys 225	Ser	Ala	Asp	His	Lys 230	Asn	Leu	Glu	Ile	Ile 235	Val	Thr	Asn	Gly	Tyr 240
Asp	Lys	Asp	Ser	Phe 245	Val	Gln	Gly	Val	Gln 250	Asn	Ser	Ile	His	Thr 255	Ser
Pro	Ser	Leu	Asn 260	Gly	Arg	Cys	Thr	Glu 265	Glu	Val	Lys	Ser	Val 270	Asp	Glu
Asn	Leu	Glu 275	Gln	Thr	Gly	Lys	Thr 280	Val	Val	Phe	Val	His 285	Gln	Asp	Val
Asn	Ser 290	Asp	His	Val	Glu	Asp 295	Ile	Ser	Gly	Ile	Gln 300	His	Leu	Thr	Ser
Asp 305	Ser	Asp	Ser	Glu	Val 310	Tyr	Cys	Asp	Ser	Met 315	Glu	Gln	Phe	Gly	Gln 320
Glu	Glu	Ser	Leu	Asp 325	Gly	Phe	Ile	Ser	Asn 330	Asn	Gly	Pro	Phe	Ser 335	Tyr
Tyr	Leu	Gly	Gly 340	Asn	Pro	Ser	Gln	Pro 345	Leu	Glu	Ser	Ser	Gly 350	Phe	Pro
Glu	Ala	Val 355	Gln	Gly	Leu	Pro	Gly 360	Asn	Gly	Ser	Pro	Glu 365	Asp	Met	Gln

Gly Ala Val Val Glu Gly Lys Gly Glu Val Lys Arg Gly Glu Asp

Gly Gly Ser Asn Ser Gly Ala Pro His Arg Glu Lys Arg Ala Gly Glu 385 390 395 400

Ser Glu Glu Phe Ser Asn Ile Arg Arg Gly Arg Gly His Arg Met Gln
405 410 415

His Leu Ser Glu Gly Ser Lys Gly Arg Gln Val Gly Ser Gly Gly Asp 420 425 430

Gly Glu Arg Trp Gly Ser Asp Arg Gly Ser Arg Gly Ser Leu Asn Glu 435 440 445

Gln Ile Ala Leu Val Leu Met Arg Leu Gln Glu Asp Met Gln Asn Val 450 455 460

Leu Gln Arg Leu His Lys Leu Glu Met Leu Ala Ala Ser Gln Ala Lys
465 470 475 480

Ser Ser Ala Leu Gln Thr Ser Asn Gln Pro Thr Ser Pro Arg Pro Ser 485 490 495

Trp Trp Pro Phe Glu Met Ser Pro Gly Ala Leu Thr Phe Ala Ile Ile 500 505 510

Trp Pro Phe Ile Ala Gln Trp Leu Val His Leu Tyr Tyr Gln Arg Arg 515 520 525

Arg Arg Lys Leu Asn 530

<210> 195

<211> 195

<212> PRT

<213> Homo sapiens

<400> 195

Met Asn Arg Thr Ala Met Arg Ala Ser Gln Lys Asp Phe Glu Asn Ser 1 5 10 15

Met Asn Gln Val Lys Leu Leu Lys Lys Asp Pro Gly Asn Glu Val Lys
20 25 30

Leu Lys Leu Tyr Ala Leu Tyr Lys Gln Ala Thr Glu Gly Pro Cys Asn
35 40 45

Met Pro Lys Pro Gly Val Phe Asp Leu Ile Asn Lys Ala Lys Trp Asp
50 55 60

Ala 65	Trp	) Asr	n Ala	Lev	Gly 70		Lev	Pro	Lys	75		Ala	Arg	Gln	Asn 80
Туг	· Val	. Asp	Leu	Val		Ser	Leu	Ser	Pro		Leu	Glu	Ser	Ser 95	Ser
Gln	Val	. Glu	Pro 100	Gly	Thr	Asp	Arg	Lys 105		Thr	Gly	Phe	Glu 110		Leu
Val	Val	Thr 115	Ser	Glu	. Asp	Gly	7 Ile 120		Lys	Ile	Met	Phe 125		Arg	Pro
Lys	Lys 130	Lys	Asn	Ala	Ile	His 135		Glu	Met	Tyr	His 140	Glu	Ile	Met	Arg
Ala 145	Leu	Lys	Ala	Ala	Ser 150	Lys	Asp	Asp	Ser	Ile 155	Ile	Thr	Val	Leu	Thr 160
Gly	Asn	Gly	Asp	Tyr 165	Tyr	Ser	Ser	Gly	Asn 170	Asp	Leu	Thr	Asn	Phe 175	Thr
Asp	Ile	Pro	Pro 180	Gly	Gly	Val	Glu	Glu 185		Ala	Lys	Asn	Asn 190	Ala	Val
Leu	Leu	Arg 195													
<21	0> 1	96													
<21	1> 8	9													
<21	2> P	RT													
<21	3> H	omo :	sapie	ens											
<40	0> 19	96													
Leu 1	Gln	Glu	Asp	Phe 5	Glu	Ala	Ala	Ala	Glu 10	Lys	Val	Lys	Lys	Leu 15	Lys
Lys	Asn	Gly	Pro 20	Val	Lys	Pro	Ser	Asn 25	Glu	Glu	Lys	Leu	Lys 30	Leu	Tyr
Ser	Leu	Tyr 35	Lys	Gln	Ala	Thr	Val 40	Gly	Asp	Val	Asn	Thr 45	Glu	Arg	Pro
Gly	Met	Phe	Asp	Leu	Lys	Gly	Arg	Ala	Lys	Trp	Asp	Ala	Trp	Asn	Glu
Leu 65	50 Lys	Gly	Met	Ser	Lys 70	55 Glu	Glu	Ala	Met	Lys 75	60 Ala	Tyr	Ile	Ala	Lys 80
Val	Glu	Glu	Leu	Ile 85	Ala	Lys	Tyr	Ala							

<210> 197

<211> 88

<212> PRT

<213> Homo sapiens

<400> 197

Cys Gln Lys Gln Phe Gln Ala Ala Val Ser Val Ile Gln Asn Leu Pro

Lys Asn Gly Ser Tyr Arg Pro Ser Tyr Glu Glu Met Leu Arg Phe Tyr 25

Ser Tyr Tyr Lys Gln Ala Thr Met Gly Pro Cys Leu Val Pro Arg Pro

Gly Phe Trp Asp Pro Ile Gly Arg Tyr Lys Trp Asp Ala Trp Asn Ser

Leu Gly Lys Met Ser Arg Glu Glu Ala Met Ser Ala Tyr Ile Thr Glu

Met Lys Leu Val Ala Gln Lys Val 85

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<211> 20

<212> PRT

<213> Homo sapiens

<400> 198

Gln Ala Thr Met Gly Pro Cys Leu Val Pro Arg Pro Gly Phe Trp Asp

Pro Ile Gly Arg

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•	construct; chemically synthesized	
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